



MAJOR SOURCE OPERATING PERMIT

PERMITTEE: BASF CORPORATION
FACILITY NAME: MCINTOSH FACILITY
FACILITY/PERMIT NO.: 108-0003
LOCATION: MCINTOSH, WASHINGTON COUNTY, ALABAMA

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code 1975, §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code 1975, §§22-22A-1 to 22-22A-15, (2006 Rplc. Vol. and 2007 Cum. Supp.) and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

Pursuant to the Clean Air Act of 1990, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the Clean Air Act of 1990 are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.

Issuance Date: DRAFT
Effective Date: DRAFT
Expiration Date: DRAFT

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General Permit Provisos

Federally Enforceable Provisos

Regulations

1. Transfer

This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another, except as provided in Rule 335-3-16-.13(1)(a)5.

ADEM Admin code r.
335-3-16-.02(6)

2. Renewals

An application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of this permit.

ADEM Admin code r.
335-3-16-.12(2)

The source for which this permit is issued shall lose its right to operate upon the expiration of this permit unless a timely and complete renewal application has been submitted within the time constraints listed in the previous paragraph.

3. Severability Clause

The provisions of this permit are declared to be severable and if any section, paragraph, subparagraph, subdivision, clause, or phrase of this permit shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair, or invalidate the remainder of this permit, but shall be confined in its operation to the section, paragraph, subparagraph, subdivision, clause, or phrase of this permit that shall be directly involved in the controversy in which such judgment shall have been rendered.

ADEM Admin code r.
335-3-16-.05(e)

4. Compliance

(a) The permittee shall comply with all conditions of ADEM Admin. Code 335-3. Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and ADEM Admin. Code 335-3 and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application by the permittee.

ADEM Admin code r.
335-3-16-.05(f)

(b) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.

ADEM Admin code r.
335-3-16-.05(g)

5. Termination for Cause

This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance will not stay any permit condition.

ADEM Admin code r.
335-3-16-.05(h)

6. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

ADEM Admin code r.
335-3-16-.05(i)

7. Submission of Information

The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.

ADEM Admin code r.
335-3-16-.05(j)

8. Economic Incentives, Marketable Permits, and Emissions Trading

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

ADEM Admin code r.
335-3-16-.05(k)

9. Certification of Truth, Accuracy, and Completeness:

Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

ADEM Admin code r.
335-3-16-.07(a)

10. Inspection and Entry

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following:

ADEM Admin code r.
335-3-16-.07(b)

- (a) Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept pursuant to the conditions of this permit;
- (b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit;

- (c) Inspect, at reasonable times, this facility's equipment (including monitoring equipment and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.

11. Compliance Provisions

- (a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.
- (b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.

ADEM Admin code r.
335-3-16-.07(c)

12. Compliance Certification

A compliance certification shall be submitted annually by February 28.

ADEM Admin code r.
335-3-16-.07(e)

- (a) The compliance certification shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) The method(s) or other means used for determining the compliance status of the source, currently and over the reporting period consistent with Rule 335-3-16-.05(c) (Monitoring and Recording Keeping Requirements);
 - (4) Whether compliance has been continuous or intermittent;
 - (5) Such other facts as the Department may require to determine the compliance status of the source;
- (b) The compliance certification shall be submitted to :

Alabama Department of Environmental Management
Air Division
P.O. Box 301463
Montgomery, AL 36130-1463

and to:

Air and EPCRA Enforcement Branch
EPA Region IV
61 Forsyth Street, SW
Atlanta, GA 30303

13. Reopening for Cause

Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:

ADEM Admin code r.
335-3-16-.13(5)

- (a) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire.
- (b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.
- (c) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- (d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

14. Additional Rules and Regulations

This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.

§22-28-16(d), Code of Alabama 1975, as amended

15. Equipment Maintenance or Breakdown

- (a) In case of shutdown of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down shall be reported to the Department at least twenty-four (24) hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. Such prior notice shall include, but is not limited to the following:

ADEM Admin code r.
335-3-1-.07(1),(2)

- (1) Identification of the specific facility to be taken out of service as well as its location and permit number;
- (2) The expected length of time that the air pollution control equipment will be out of service;

- (3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period;
 - (4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period;
 - (5) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.
- (b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director will be notified when the breakdown has been corrected.

16. Operation of Capture and Control Devices

All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.

§22-28-16(d), Code of Alabama 1975, as amended

17. Obnoxious Odors

This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.

ADEM Admin code r. 335-3-1-.08

18. Fugitive Dust

- (a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.
- (b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne:
 - (1) By the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic; or

ADEM Admin code r. 335-3-4-.02

- (2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created; or
- (3) By paving; or
- (4) By the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions; or
- (5) By any combination of the above methods which results in the prevention of dust becoming airborne from the road surface.

19. Additions and Revisions

Any modifications to this source shall comply with the modification procedures in Rules 335-3-16-.13 or 335-3-16-.14.

ADEM Admin code r. 335-3-16-.13 and .14

20. Recordkeeping Requirements

- (a) Records of required monitoring information of the source shall include the following:
 - (1) The date, place, and time of all sampling or measurements;
 - (2) The date analyses were performed;
 - (3) The company or entity that performed the analyses;
 - (4) The analytical techniques or methods used;
 - (5) The results of all analyses; and
 - (6) The operating conditions that existed at the time of sampling or measurement.
- (b) Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit

ADEM Admin code r. 335-3-16-.05(c)2.

21. Reporting Requirements

- (a) Reports to the Department of any required monitoring shall be submitted at least every 6 months by February 28th, and August 31st of each year. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with Rule 335-3-16-.04(9).

ADEM Admin code r. 335-3-16-.05(c)3)

- (b) Deviations from permit requirements shall be reported within 48 hours or 2 working days of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.

22. Emission Testing Requirements

Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.

ADEM Admin code r.
335-3-1-.05(3) and 335-3-1-.04(1)

The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department’s air pollution control rules and regulations.

To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:

- (a) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.
- (b) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures require probe cleaning).
- (c) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity.
- (d) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances

ADEM Admin code r.
335-3-1-.04

A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.

ADEM Admin code r.
335-3-1-.04

All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.

23. Payment of Emission Fees

Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code R. 335-1-7-.04.

ADEM Admin code r.
335-1-7-.04

24. Other Reporting and Testing Requirements

Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require emission testing at any time.

ADEM Admin code r.
335-3-1-.04(1)

25. Title VI Requirements (Refrigerants)

Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.

ADEM Admin code r.
335-3-16-.05(a)

No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F.

The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the US EPA and the Department as required.

26. Chemical Accidental Prevention Provisions

If a chemical listed in Table 1 of 40 CFR Part 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:

40 CFR Part 68

- (a) The owner or operator shall comply with the provisions in 40 CFR Part 68.
- (b) The owner or operator shall submit one of the following:
 - (1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR Part 68 § 68.10(a) or,
 - (2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.

<p>27. Display of Permit</p> <p>This permit shall be kept under file or on display at all times at the site where the facility for which the permit is issued is located and will make the permit readily available for inspection by any or all persons who may request to see it.</p>	<p>ADEM Admin code r. 335-3-14-.01(1)(d)</p>
<p>28. Circumvention</p> <p>No person shall cause or permit the installation or use of any device or any means which, without resulting in the reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.</p>	<p>ADEM Admin code r. 335-3-1-.10</p>
<p>29. Visible Emissions</p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.</p>	<p>ADEM Admin code r. 335-3-4-.01(1)</p>
<p>30. Fuel-Burning Equipment</p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.03.</p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge sulfur dioxide emissions in excess of the emissions specified in Part 335-3-5-.01.</p>	<p>ADEM Admin code r. 335-3-4-.03</p> <p>ADEM Admin code r. 335-3-5-.01</p>
<p>31. Process Industries – General</p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, no process may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.04.</p>	<p>ADEM Admin code r. 335-3-4-.04</p>
<p>32. Averaging Time for Emission Limits</p> <p>Unless otherwise specified in the permit, the averaging time for the emission limits listed in this permit shall be the nominal time required by the specific test method.</p>	<p>ADEM Admin code r. 335-3-1-.05</p>

33. Permit Shield

A permit shield exists under this operating permit in accordance with ADEM Administrative Code R. 335-3-16-.10 in that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance. The permit shield is based on the accuracy of the information supplied in Section 3 of the application for this permit. Under this shield, it has been determined that requirements listed as non-applicable in such section are not applicable to this source.

ADEM Admin code r.
335-3-16-.10

34. Compliance Assurance Monitoring (CAM)

Conditions (a) through (d) that follow are general conditions applicable to emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the unit specific provisos and the attached CAM appendices.

(a) Operation of Approved Monitoring

40 CFR 64.7

- (1) *Commencement of operation.* The owner or operator shall conduct the monitoring required under this section and detailed in the unit specific provisos and CAM appendix of this permit (if required) upon issuance of the permit, or by such later date specified in the permit pursuant to §64.6(d).
- (2) *Proper maintenance.* At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (3) *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (4) *Response to excursions or exceedances.* (a) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the

likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(b) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

- (5) *Documentation of need for improved monitoring.* After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Department and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(b) Quality Improvement Plan (QIP) Requirements

40 CFR 64.8

- (1) Based on the results of a determination made under Section 33(a)(4)(b) above, the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with 40 CFR §64.6(c)(3), the permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

- (2) Elements of a QIP:
- (a) The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
 - (b) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
 - (i) Improved preventive maintenance practices.
 - (ii) Process operation changes.
 - (iii) Appropriate improvements to control methods.
 - (iv) Other steps appropriate to correct control performance.
 - (v) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (2)(b)(i) through (iv) above).
- (3) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (4) Following implementation of a QIP, upon any subsequent determination pursuant to Section 33(a)(4)(b) above, the Department may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:
- (a) Failed to address the cause of the control device performance problems; or
 - (b) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (5) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(c) Reporting and Recordkeeping Requirements

40 CFR 64.9

(1) General reporting requirements

- (a) On and after the date specified in Section 33(a)(1) above by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with ADEM Admin. Code R. 335-3-16-.05(c)3.
- (b) A report for monitoring under this part shall include, at a minimum, the information required under ADEM Admin. Code R. 335-3-16-.05(c)3. and the following information, as applicable:
 - (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in Section 33(b) above. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(2) General recordkeeping requirements.

- (a) The owner or operator shall comply with the recordkeeping requirements specified in ADEM Admin. Code R. 335-3-16-.05(c)2.. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Section 33(b) above and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer

files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

(d) Savings Provisions

40 CFR 64.10

(1) Nothing in this part shall:

- (a) Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this part shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.
- (b) Restrict or abrogate the authority of the Department to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.
- (c) Restrict or abrogate the authority of the Department to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

Area 1—Granulation Manufacturing Unit Summary

Description: Granulation Manufacturing Unit

Operating Schedule: 8760 hours/year.

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:
NA

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
GR-EP-01	Regenerative Thermal Oxidizer	VOC	RTO Temperature 1500°F	335-3-14-.04
GR-EP-01	Regenerative Thermal Oxidizer	PM	$E = 3.59P^{0.62}$	335-3-4-.04(1)
GR-EP-01	Regenerative Thermal Oxidizer	Opacity	<20%	335-3-4.01
GR-EP-02, GR-EP-03, GR-EP-04, GR-EP-05, GR-EP-06, GR-EP-07, GR-EP-08, GR-EP-09, GR-EP-10, GR-EP-11, GR-EP-13, GR-EP-14, and GR-EP-15	Baghouses	PM	$E = 3.59P^{0.62}$	335-3-4-.04(1)
GR-EP-02, GR-EP-03, GR-EP-04, GR-EP-05, GR-EP-06, GR-EP-07, GR-EP-08, GR-EP-09, GR-EP-10, GR-EP-11, GR-EP-13, GR-EP-14, and GR-EP-15	Baghouses	Opacity	<20%	335-3-4-.01
GR-EP-15	Baghouse	PM	3.40 lb/hr	335-3-14-.04

**Area 1—Granulation Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This unit has accepted limits for VOC during past modifications to remain minor with respect to PSD significance threshold.	ADEM Admin. Code r. 335-3-14-.04
<i>Emission Standards</i>	
1. Such that the major modification threshold for the Prevention of Significant Deterioration (PSD) regulations shall not be exceeded, the following standard shall apply: <ul style="list-style-type: none"> • The operating temperature of the regenerative thermal oxidizer, as measured in the center of the gravel bed depth, shall not fall below 1500 °F as averaged in any rolling one hour period during the operation of the process unit. • The particulate matter emissions from point GR-EP-15 shall not exceed 3.40 lb/hr. 	ADEM Admin. Code r. 335-3-14-.04
2. The particulate matter emissions from emission points GR-EP-01, GR-EP-02, GR-EP-03, GR-EP-04, GR-EP-05, GR-EP-06, GR-EP-07, GR-EP-08, GR-EP-09, GR-EP-10, GR-EP-11, GR-EP-13, GR-EP-14, and GR-EP-15 shall not exceed the maximum emission rate of $3.59 * (\text{process rate})^{0.62}$.	ADEM Admin. Code r. 335-3-4-.04(1)
3. Opacity shall not exceed twenty percent (20%) as determined by six-minute average. During one six-minute period in any sixty minute period, this unit may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%).	ADEM Admin. Code r. 335-3-4-.01

**Area 1—Granulation Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the particulate emission rates of this unit shall be determined by Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
2. Compliance with the opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
<i>Emission Monitoring</i>	
1. Emission points GR-EP-01, GR-EP-02, GR-EP-03, GR-EP-04, GR-EP-05, GR-EP-06, GR-EP-07, GR-EP-08, GR-EP-09, GR-EP-10, GR-EP-11, GR-EP-13, GR-EP-14, and GR-EP-15 shall be checked for the presence or absence of visible emissions at least once per calendar week while the equipment associated with these points is in operation. If visible emissions are observed during the visible emissions check, a Visual Determination of Opacity shall be performed using EPA Reference Method 9 or corrective action shall be taken within twelve (12) hours. If the Visual Determination of Opacity confirms that the source is discharging particulate emissions above limits specified in Emission Standard 3 of this permit, corrective action will be initiated within twelve (12) hours of discovery to reduce particulate emissions below limits specified.	ADEM Admin. Code r. 335-3-16-.05(c)
2. The operating temperature of the regenerative thermal oxidizer, as measured at the center of the gravel bed depth (emission point GR-EP-01), shall be continuously monitored and shall be averaged over an rolling 1 hour period by a device that shall be properly installed, operated, and maintained.	ADEM Admin. Code r. 335-3-16-.05(c)

Area 1—Granulation Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements</i>	
<p>1. The facility shall maintain records of its weekly visual inspections of emission points GR-EP-01, GR-EP-02, GR-EP-03, GR-EP-04, GR-EP-05, GR-EP-06, GR-EP-07, GR-EP-08, GR-EP-09, GR-EP-10, GR-EP-11, GR-EP-13, GR-EP-14, and GR-EP-15. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from any of these points shall be recorded and reported in the semi-annual report. The facility shall keep records of the corrective action taken in the event visible emissions are observed.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)</p>
<p>2. The facility shall maintain records of the temperature for the regenerative thermal oxidizer (emission point GR-EP-01). The records, which may be in the form of a log or a checklist, shall be kept up-to-date, readily accessible, and in a form suitable for inspection for five years. If at any time, the parameters do not meet minimum levels and the unit is operating, it shall be recorded and reported during the semi-annual report.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)</p>

Area 1—Irgafos Manufacturing Unit Summary

Description: Area 1 – Irgafos Manufacturing Unit

Operating Schedule: 8760 hours/year.

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:
40 CFR Part 63 Subparts FFFF and NNNNN

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
IG-EP-01	Vent Gas Combustor	VOC	0.35 lb/hr	335-3-14-.04
IG-EP-01	Vent Gas Combustor	VOC	≥99.9% DE	335-3-14-.04
IG-EP-01	Vent Gas Combustor	HAP	≥98% DE or ≤20 ppmv as organic HAP or TOC	335-3-11-.06(83)
IG-EP-01	Vent Gas Combustor	Opacity	<20%	335-3-4-.01
N/A	Caustic Scrubber V-47	HCl	≥99% DE or ≤20 ppmv	335-3-11-.06(117) 335-3-11-.06(83)
N/A	Water Scrubber V-47A	HCl	≥99% DE or ≤20 ppmv	335-3-11-.06(117) 335-3-11-.06(83)
IG-EP-03	Wastewater	HAP	Group II	335-3-11-.06(83)
IG-EP-FUG	Fugitives	VOC/HAP	LDAR Program Part 63 Subpart UU	335-3-14-.04 335-3-11-.06(46) 335-3-11-.06(117)

Area 1—Irgafos Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This unit has accepted limits for VOCs during past modifications to remain minor with respect to PSD significance threshold.	ADEM Admin. Code r. 335-3-14-.04
3. This unit is subject to 40 CFR Part 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (MON).	ADEM Admin. Code r. 335-3-11-.06(83)
4. This unit is subject to 40 CFR Part 63, Subpart NNNNN – National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production.	ADEM Admin. Code r. 335-3-11-.06(117)
5. The unit is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart FFFF, Subpart UU, or Subpart NNNNN.	ADEM Admin. Code r. 335-3-11-.06(1)
6. This unit is subject to 40 CFR Part 63, Subpart UU – National Emission Standards for Equipment Leaks – Control Level 2 Standards	ADEM Admin. Code r. 335-3-11-.06(46)
7. This facility has accepted a requirement to perform a leak detection program equivalent to 40 CFR Part 60, Subpart VV in order to remain minor with respect to PSD. Compliance with 40 CFR Part 63, Subpart UU shall constitute compliance with this requirement.	ADEM Admin. Code r. 335-3-14-.04
<i>Emission Standards</i>	
1. Such that the major modification threshold for the Prevention of Significant Deterioration (PSD) regulations shall not be exceeded, the following standards shall apply:	ADEM Admin. Code r. 335-3-14-.04

Area 1—Irgafos Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards continued</i>	
<ul style="list-style-type: none"> • All volatile organic compound point source emissions, including all process vessel vents, from this production unit shall vent to the vent gas combustor except for the bio-system waste water tank and ethylene glycol process tank (emission points IG-EP-03 and IG-EP-04, respectively). • The vent gas combustor (VGC), emission point IG-EP-01, of this unit shall be properly maintained, controlled, and operated to achieve a 99.9% or greater destruction efficiency of all inlet volatile organic compounds (VOCs). • The maximum VOC emission rate from the vent gas combustor shall not exceed 0.35 lb/hr. 	
2. Opacity shall not exceed twenty percent (20%) as determined by six-minute average. During one six-minute period in any sixty minute period, this unit may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%).	ADEM Admin. Code r. 335-3-4-.01
3. The caustic scrubber (V-47) and water scrubber (V-47A), of this unit shall be properly maintained, controlled, and operated to achieve an outlet concentration of ≤ 20 ppmv HCl, or a destruction efficiency of $\geq 99\%$ for HCl, in accordance with the requirements of 40 CFR Part 63, Subpart NNNNN.	ADEM Admin. Code r. 335-3-11-.06(117)
4. The facility shall implement and maintain a Leak Detection and Repair (LDAR) Program equivalent to 40 CFR Part 63, Subpart UU, for components subject to monitoring in accordance with the MON (§63.2480).	ADEM Admin. Code r. 335-3-11-.06(46)
5. The facility shall implement and maintain an LDAR Program equivalent to 40 CFR Part 63, Subpart UU, for components in VOC service to remain a minor source with respect to PSD.	ADEM Admin. Code r. 335-3-14-.04
6. The facility shall implement and maintain an LDAR program for components in HCl service as outlined in the Notice of Compliance Status in accordance with 40 CFR Part 63, Subpart NNNNN and amended as applicable.	ADEM Admin. Code r. 335-3-11-.06(117)

**Area 1—Irgafos Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Emission Standards continued</i>	
7. The MON wastewater streams in this unit have been classified as Group 2 existing sources and as such are only subject to the recordkeeping and reporting requirements as listed §§63.146(b)(1) and 63.147(b)(8).	ADEM Admin. Code r. 335-3-11-.06(83)
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
2. Compliance with the volatile organic compound emission rates of this unit shall be determined by Reference Method 18 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
3. Compliance with the volatile organic compound emission rates for leaks of this unit shall be determined by Reference Method 21 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
4. The test methods and procedures for determining wastewater applicability, Group 1/Group 2 determinations and compliance as specified in 63.144 and 63.145 of Subpart G of the HON shall be followed as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
5. Compliance with the HCL standard for this unit shall be determined by Reference Method 26A in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-11-.06(117)

Area 1—Irgafos Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
<p>1. At any time, should visible emissions be observed from the vent gas combustor (IG-EP-01) by plant personnel or a representative of the Department, action to correct this problem should be initiated within 4 hours. Records of each occurrence of observed visible emissions shall be maintained in a logbook suitable for inspection by the Department and should include the findings of the incident and what action was taken to correct the problem.</p>	ADEM Admin. Code r. 335-3-16-.05(c)
<p>2. The operating temperature and oxygen content of the exhaust gas, as measured in the combustion chamber of the vent gas combustor (IG-EP-01), shall be continuously monitored and averaged over an rolling 1 hour period, and shall be operated above the limits set by the initial compliance test or any subsequent compliance test in order to maintain a minimum destruction efficiency of all inlet VOCs as measured by performance testing.</p>	ADEM Admin. Code r. 335-3-16-.05(c)
<p>3. This facility shall follow monitoring requirements equivalent to those of 40 CFR 63, Subpart UU for components subject to the MON.</p>	ADEM Admin. Code r. 335-3-11-.06(46)
<p>4. This facility shall follow monitoring requirements equivalent to those of 40 CFR Part 63, Subpart UU for components in VOC service.</p>	ADEM Admin. Code r. 335-3-14-.04
<p>5. This facility shall follow monitoring requirements as set forth in the Notice of Compliance status for components subject to 40 CFR Part 63, Subpart NNNNN.</p>	ADEM Admin. Code r. 335-3-11-.06(117)

Area 1—Irgafos Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring Continued</i>	
<p>6. In order to ensure an outlet concentration of ≤ 20 ppmv HCl, or a destruction efficiency of $\geq 99\%$ for HCl, the facility shall maintain a caustic flowrate of ≥ 65 gpm and maintain an effluent pH of ≥ 13.2 for the caustic scrubber V-47, or values for flowrate and pH obtained during the most recent demonstration of compliance with applicable emission limits. These parameters shall be measured and recorded at least every 15 minutes.</p>	ADEM Admin. Code r. 335-3-11-.06(117)
<p>7. When the pre-condenser is used, the facility shall maintain a temperature of $\leq 17^{\circ}$ C. These parameters shall be measured and recorded at least every 15 minutes.</p>	ADEM Admin. Code r. 335-3-11-.06(117)
<i>Recordkeeping and Reporting Requirements</i>	
<p>1. The presence of any visible emissions from the vent gas combustor (IG-EP-01) shall be recorded. The facility shall keep records of the corrective action taken in the event visible emissions are observed. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from any of these points shall be recorded and reported during the semi-annual report.</p>	ADEM Admin. Code r. 335-3-16-.05(c)
<p>2. The facility shall maintain records of temperature and oxygen content for emission point IG-EP-01. The records, which may be in the form of a log or a checklist, shall be kept up-to-date, readily accessible, and in a form suitable for inspection for five years. If at any time these parameters do not meet minimum levels as established by compliance / performance testing and the unit is operating, it shall be recorded and reported during the semi-annual report.</p>	ADEM Admin. Code r. 335-3-16-.05(c)

Area 1—Irgafos Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements Continued</i>	
3. The facility shall follow the recordkeeping and reporting requirements equivalent to those of 40 CFR Part 63, Subpart UU as applicable.	ADEM Admin. Code r. 335-3-11-.06(46)
4. The facility shall maintain records of any time that the unit is in operation and the vent gas combustor is not operating. The records shall consist of the time, duration, and cause of the outage, as well as the corrective action taken. The occurrence of such an event shall be reported in accordance with general provisos 15 and 21b and in the semi-annual report. The records shall be kept in a form suitable for inspection for five years.	ADEM Admin. Code r. 335-3-16-.05(c)
5. The facility shall maintain hourly rolling averages and daily averages of the caustic scrubber's flowrates and pH readings, water scrubber flowrates, and the pre-condenser's temperature profiles.	ADEM Admin. Code r. 335-3-11-.06(117)
6. The facility shall follow the recordkeeping and reporting requirements for the equipment subject to the MON, 40 CFR Part 63, Subpart FFFF, as specified in 63.2520 and 63.2525.	ADEM Admin. Code r. 335-3-11-.06(83)
7. The reporting and recordkeeping requirements for the HON wastewater streams shall be followed as specified in 63.146 and 63.147, as applicable.	ADEM Admin. Code r. 335-3-11-.06(6)
8. The facility shall follow the recordkeeping and reporting requirements for the equipment subject to the HCl MACT, 40 CFR Part 63, Subpart NNNNN, as specified in 63.9050 and 63.9055 as applicable.	ADEM Admin. Code r. 335-3-11-.06(117)

Area 1 Irgafos Storage Tanks Summary

Description: Area 1 Storage Tanks.

Operating Schedule: 8760 hours/year.

These units may be subject to the following NSPSs or MACTs:

40 CFR Part 63, Subpart FFFF and Subpart NNNNN

Pollutants Emitted

Tank Number	Size of Tank (gallons)	Material in Tank	Maximum Vapor Pressure (psia)	Control Technique	Standard
771-V-01	10,000	Volatile Organic Liquid	-	Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
771-V-02	10,000	Volatile Organic Liquid	-	Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
771-V-03	10,000	Volatile Organic Liquid	2.6	Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
771-V-04	10,000	Volatile Organic Liquid	1.12	Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-14-.04
771-V-05	10,000	Volatile Organic Liquid	1.12	Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
771-V-06	30,000	Volatile Organic Liquid	0.0052	Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-14-.04
771-V-07	10,000	HCl	-	Vent to process scrubber	ADEM Admin Code 335-3-11-.06(117)
771-V-08	6,000	Phosphorous Trichloride	-	Vent to process scrubber	ADEM Admin Code 335-3-14-.04
771-V-10	5,000	Volatile Organic Liquid	-	Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-14-.04
771-V-11	5,000	Volatile Organic Liquid	-	Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)

Area 1 Irgafos Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin Code r. 335-3-16-.03
2. The following tanks are subject to ADEM Administrative Code R. 335-3-6-.03. <ul style="list-style-type: none"> • 771-V-04 	ADEM Admin Code r. 335-3-6-.03
3. The following tanks are subject to the applicability requirements of 40 CFR Part, Subpart FFFF. <ul style="list-style-type: none"> • 771-V-01, 771-V-02, 771-V-03, 771-V-05, and 771-V-11 	ADEM Admin Code r. 335-3-11-.06(83)
4. Storage tank 771-V-07 is subject to the applicable requirements of 40 CFR Part 63, Subpart NNNNN.	ADEM Admin Code r. 335-3-11-.06(117)
<i>Emission Standards</i>	
1. The following tanks shall be vented to the Vent Gas Combustor (VGC). <ul style="list-style-type: none"> • 771-V-01, 771-V-02, 771-V-03, 771-V-04, 771-V-05, 771-V-06, 771-V-10, and 771-V-11. 	ADEM Admin Code r. 335-3-14-.04 & 335-3-11-.06(83)
2. Tanks 771-V-07 and 771-V-08 shall be vented to the process scrubber associated with this unit.	ADEM Admin Code r. 335-3-11-.06(117)
3. All pollution control equipment shall be properly maintained, controlled and operated to achieve a maximum efficiency for all inlet volatile organic compounds.	ADEM Admin Code r. 335-3-14-.04

Area 1 Irgafos Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards (cont.)</i>	
4. The vent gas combustor shall be properly maintained, controlled, and operated to achieve 99.9% or greater destruction efficiency of all inlet volatile organic compounds.	ADEM Admin Code r. 335-3-14-.04
5. Tank 771-V-03 shall not contain volatile organic liquids, which have vapor pressures greater than 2.6 psia.	ADEM Admin Code r. 335-3-14-.04
6. Tanks 771-V-04 and 771-V-05 shall not contain volatile organic liquids which have vapor pressures greater than 1.12 psia.	ADEM Admin Code r. 335-3-14-.04
7. Tanks 771-V-01 and 771-V-02 shall not contain volatile organic liquids that have vapor pressures greater than 0.18 psia.	ADEM Admin Code r. 335-3-14-.04
8. Tank 771-V-06 shall not contain volatile organic liquids that have vapor pressures greater than 0.0052 psia.	ADEM Admin Code r. 335-3-14-.04
9. A vapor balance line shall be used during all loading into tank 771-V-06 to minimize volatile organic compound emissions.	ADEM Admin Code r. 335-3-14-.04
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the volatile organic compound emission rates of this unit shall be determined by Reference Method 18 or 25A in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code R. 335-3-11-.06(83)

Area 1 Irgafos Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
1. The facility shall perform inspections of the vent line header for all tanks which vent to a control device at least once per calendar year not to exceed 15 months between inspections to insure the vent lines are intact and operating properly.	ADEM Admin. Code R. 335-3-16-.04 & 335-3-11-.06(83)
<i>Recordkeeping and Reporting Requirements</i>	
1. Records containing the identification of the current type of liquid stored and its maximum true vapor pressure at storage temperature must be maintained for the following tanks and these records must be readily available for inspection at all times and shall be retained for at least five years. <ul style="list-style-type: none"> • 771-V-03, 771-V-04, 771-V-05, and 771-V-06. 	ADEM Admin Code R. 335-3-14-.04
2. Records shall be maintained for all periods of operation during in which the process scrubber is not in operation for tanks 771-V-07 and 771-V-08.	ADEM Admin Code R. 335-3-11-.06(117)
3. Records shall be maintained for all periods of operation during which the vent gas combustor in not in operation for tanks 771-V-01, 771-V-02, 771-V-03, 771-V-04, 771-V-05, 771-V-06, 771-V-07, 771-V-08, 771-V-10, and 771-V-11. Reports of all periods recorded during which the vent gas combustor was down shall be submitted in the semi-annual report.	ADEM Admin Code R. 335-3-14-.04
4. Records of the annual inspections of the vent line header for tanks which vent to a control device shall be maintained. These records shall be recorded in a permanent form suitable for inspection and shall be retained for at least five years.	ADEM Admin. Code R. 335-3-14-.04 & 335-3-11-.06(83)
5. The Irgafos Unit shall maintain records of all data used to determine MON applicability as outlined in 40 CFR 63.2520(d) of Subpart FFFF.	ADEM Admin Code R. 335-3-11-.06(83)

Area 1—Irganox Manufacturing Unit Summary

Description: Antioxidant Manufacturing Unit

Operating Schedule: 8760 hours/year.

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:
40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
16-EP-01, 16-EP-03, 16-EP-07, 16-EP-12, 16-EP-13, and 16-EP-14	Baghouses	PM	$E = 3.59P^{0.62}$	335-3-4-.04(1)
16-EP-01, 16-EP-03, 16-EP-07, 16-EP-12, 16-EP-13, and 16-EP-14	Baghouses	Opacity	<20%	335-3-4-.01
16-EP-05	Packed Bed Scrubber	VOC	336 hr/yr	335-3-14-.04
16-EP-05	Packed Bed Scrubber	VOC	≥ 98.0 % DE	335-3-14-.04
16-EP-05	Packed Bed Scrubber	HAP	≥98% DE or ≤20 ppmv as organic HAP or TOC	335-3-11-.06(83)
16-EP-11	Vent Gas Combustor	Opacity	<20%	335-3-4-.01
16-EP-11	Vent Gas Combustor	VOC	≥ 99.9% DE	335-3-14-.04
16-EP-11	Vent Gas Combustor	HAP	≥98% DE or ≤20 ppmv as organic HAP or TOC	335-3-11-.06(83)
16-EP-FUG	Fugitives	VOC/HAP	LDAR Program Part 63 Subpart UU	335-3-14-.04 335-3-11-.06(46)

Area 1— Irganox Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This unit has accepted limits for VOCs during past modifications to remain minor with respect to PSD significance threshold.	ADEM Admin. Code r. 335-3-14-.04
3. This unit is subject to 40 CFR Part 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (MON).	ADEM Admin. Code r. 335-3-11-.06(83)
4. The unit is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart FFFF or Subpart UU.	ADEM Admin. Code r. 335-3-11-.06(1)
5. This unit is subject to 40 CFR Part 63, Subpart UU – National Emission Standards for Equipment Leaks – Control Level 2 Standards	ADEM Admin. Code r. 335-3-11-.06(46)
6. This facility has accepted a requirement to perform a leak detection program equivalent to 40 CFR Part 60, Subpart VV in order to remain minor with respect to PSD. Compliance with 40 CFR Part 63, Subpart UU shall constitute compliance with this requirement.	ADEM Admin. Code r. 335-3-14-.04
<i>Emission Standards</i>	
1. Such that the major source threshold for the Prevention of Significant Deterioration (PSD) regulations shall not be exceeded, the following standard shall apply:	ADEM Admin. Code r. 335-3-14-.04
<ul style="list-style-type: none"> • The vent gas combustor (VGC), emission point 16-EP-11, of this unit shall be properly maintained, controlled, and operated to achieve a 99.9% or greater destruction efficiency of all inlet volatile organic compounds (VOCs). 	

Area 1— Irganox Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards continued</i>	
<ul style="list-style-type: none"> • Vent gases, which are normally vented to the VGC, shall be vented to the wet scrubber, emission point 16-EP-05, when the VGC is out of operation. Venting to the scrubber shall be limited to no greater than 336 hr per rolling 12 month period • The wet scrubber, emission point 16-EP-05, of this unit shall be properly maintained, controlled, and operated to achieve a 98.0% or greater destruction efficiency of all inlet volatile organic compounds (VOCs). • The Irganox 1300 facility and Line 6 of this unit shall implement a Leak Detection and Repair (LDAR) Program equivalent to 40 CFR Part 63, Subpart UU, for equipment in VOC service. 	
2. The facility shall implement and maintain a Leak Detection and Repair (LDAR) Program equivalent to 40 CFR Part 63, Subpart UU, for components subject to monitoring in accordance with the MON (§63.2480).	ADEM Admin. Code r. 335-3-11-.06(46)
3. The particulate matter emissions from emission points 16-EP-01, 16-EP-03, 16-EP-07, 16-EP-12, 16-EP-13, and 16-EP-14 shall not exceed the maximum emission rate of $3.59 * (\text{process rate})^{0.62}$.	ADEM Admin. Code r. 335-3-4-.04(1)
4. Opacity shall not exceed twenty percent (20%) as determined by six-minute average. During one six-minute period in any sixty minute period, this unit may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%).	ADEM Admin. Code r. 335-3-4-.01
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the particulate emission rates of this unit shall be determined by Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03

Area 1— Irganox Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures</i>	
2. Compliance with the opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
3. Compliance with the volatile organic compound emission rates of this unit shall be determined by Reference Method 18 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
4. Compliance with the volatile organic compound emission rates for leaks of this unit shall be determined by Reference Method 21 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
<i>Emission Monitoring</i>	
1. Emission points 16-EP-01, 16-EP-03, 16-EP-07, 16-EP-12, 16-EP-13, and 16-EP-14 shall be checked for the presence or absence of visible emissions at least once per calendar <u>week</u> while the equipment associated with these points is in operation. If visible emissions are observed during the visible emissions check, a Visual Determination of Opacity shall be performed using EPA Reference Method 9 or corrective action shall be taken within twelve (12) hours. If the Visual Determination of Opacity confirms that the source is discharging particulate emissions above limits specified in Emission Standard 3 of this permit, corrective action will be initiated within twelve (12) hours of discovery to reduce particulate emissions below limits specified.	ADEM Admin. Code r. 335-3-16-.05(c)

Area 1— Irganox Manufacturing Unit Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring Continued</i>	
<p>2. At any time, should visible emissions be observed from the Vent Gas Combustor (16-EP-11) by plant personnel or a representative of the Department, action to correct this problem should be initiated within 4 hours. Records of each occurrence of observed visible emissions shall be maintained in a logbook suitable for inspection by the Department and should include the findings of the incident and what action was taken to correct the problem.</p>	ADEM Admin. Code r. 335-3-16-.05(c)
<p>3. In order to insure compliance with emission standard 1, the operating temperature and oxygen content of the exhaust gas, as measured in the combustion chamber of the vent gas combustor (emission point 16-EP-11), shall be continuously monitored and record a measurement at least once every 15 minutes, and shall be operated above the limits set by the initial compliance test or any subsequent compliance test in order to maintain a minimum destruction efficiency of all inlet VOCs and organic HAP as measured by performance testing.</p>	ADEM Admin. Code r. 335-3-11-.06(83)
<p>4. When the vent gases are diverted to the wet scrubber (emission point 16-EP-05), the facility shall monitor the water flow rate continuously and record a measurement at least once every 15 minutes, and shall operate the scrubber above the limits set by the initial compliance test or any subsequent compliance test in order to maintain a minimum removal efficiency of all inlet VOCs and organic HAP as measured by performance testing.</p>	ADEM Admin. Code r. 335-3-11-.06(83)
<p>5. The Irganox 1300 facility and Line 6 of this unit shall follow monitoring requirements equivalent to those of 40 CFR Part 63, Subpart UU, for equipment in VOC service.</p>	ADEM Admin. Code R. 335-3-14-.04
<p>6. This facility shall follow monitoring requirements equivalent to those of 40 CFR 63, Subpart UU for components subject to the MON.</p>	ADEM Admin. Code r. 335-3-11-.06(46)

**Area 1— Irganox Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements</i>	
<p>1. The facility shall maintain records of its weekly visual inspections of emission points 16-EP-01, 16-EP-03, 16-EP-07, 16-EP-12, 16-EP-13, and 16-EP-14. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from any of these points shall be recorded and reported in the semi-annual report. The facility shall keep records of the corrective action taken in the event visible emissions are observed.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)</p>
<p>2. The facility shall maintain records of the hourly and daily averages of the combustion chamber temperature and oxygen content for emission point 16-EP-11. The records, which may be in the form of a log or a checklist, shall be kept up-to-date, readily accessible, and in a form suitable for inspection for five years. If at any time these parameters do not meet minimum levels as established by compliance or performance testing and the unit is operating, it shall be recorded and reported during the semi-annual report.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(83)</p>
<p>3. The facility shall follow the recordkeeping and reporting requirements equivalent to those of 40 CFR Part 63, Subpart UU as applicable.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(46)</p>
<p>4. The facility shall maintain records of any time that the unit is in operation and the vent gas combustor is not operating. The records shall consist of all times and duration when the vent gases are diverted to the wet scrubber, scrubber water flow rate, cause of the outage, as well as the corrective action taken. The occurrence of such an event shall be reported in the semi-annual report. The facility shall notify the Department if the wet scrubber (emission point 16-EP-05) exceed the hours of operation limitation set by proviso 1, during any rolling 12-month period. The records shall be kept in a form suitable for inspection for five years.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(83)</p>
<p>5. The facility shall follow the recordkeeping and reporting requirements for the equipment subject to the MON, 40 CFR Part 63, Subpart FFFF, as specified in 63.2520 and 63.2525.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(83)</p>

**Area 1— Irganox Manufacturing Unit
Provisos**

Federally Enforceable Provisos

Regulations

Recordkeeping and Reporting Requirements (Continued)

6. The presence of any visible emissions the vent gas combustor (16-EP-11) shall be recorded. The facility shall keep records of the corrective action taken in the event visible emissions are observed. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from any of these points shall be recorded and reported during the semi-annual report.

ADEM Admin. Code
r. 335-3-16-.05(c)

Area 1—Irganox Storage Tanks Summary

Description: Area 16 Storage Tanks.

Operating Schedule: 8760 hours/year.

These units may be subject to the following NSPSs or MACTs:

40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Tank Number	Size of Tank (gallons)	Material in Tank	Maximum Vapor Pressure (psia)	Control Technique	Standard
V-50	35,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-14-.04
V-51	35,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-14-.04
V-56	15,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
V-2100	35,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-14-.04
V-2200	35,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-14-.04
V-2300	10,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-14-.04
V-100-501	15,000	Volatile Organic Liquid			ADEM Admin Code 335-3-14-.04
V-100-506	15,000	Volatile Organic Liquid			ADEM Admin Code 335-3-14-.04
V-100-507	15,000	Volatile Organic Liquid			ADEM Admin Code 335-3-14-.04
V-100-510	15,000	Volatile Organic Liquid			ADEM Admin Code 335-3-14-.04
V-100-512	15,000	Volatile Organic Liquid			ADEM Admin Code 335-3-14-.04
V-100-514	15,000	Volatile Organic Liquid			ADEM Admin Code 335-3-14-.04
V-100-518	15,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
V-400-501	15,000	Volatile Organic Liquid	1.04		ADEM Admin Code 335-3-11-.06(83)
V-400-502	15,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
V-400-504	15,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
V-400-505	15,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
V-400-508	15,000	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
V-400-509	15,000	Hexanediol			ADEM Admin Code 335-3-14-.04
V-400-526	27,000	Volatile Organic Liquid			ADEM Admin Code 335-3-14-.04

Pollutants Emitted continued

Tank Number	Size of Tank (gallons)	Material in Tank	Maximum Vapor Pressure (psia)	Control Technique	Standard
16-V-15	1,500	Volatile Organic Liquid		Vent to vent gas combustor (VGC)	ADEM Admin Code 335-3-11-.06(83)
16-V-43	35,000	Volatile Organic Liquid	0.01		ADEM Admin Code 335-3-14-.04
16-V-44	35,000	Volatile Organic Liquid	0.01		ADEM Admin Code 335-3-14-.04
16-V-45	35,000	Volatile Organic Liquid	0.01		ADEM Admin Code 335-3-14-.04

Area 1—Irganox Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. The following tanks are subject to the National Emission Standards for Hazardous Air Pollutants as listed in 40 CFR Part 63, Subpart FFFF-Miscellaneous Organic Chemical Manufacturing: <ul style="list-style-type: none"> • V-56, 16-V-15, V-100-518, V-400-501, V-400-502, V-400-504, V-400-505, and V-400-508. 	ADEM Admin Code r. 335-3-11-.06(83)
<i>Emission Standards</i>	
1. The following tanks shall be vented to the Area 16 Vent Gas Combustor (VGC). <ul style="list-style-type: none"> • V-50, V-51, V-56, V-2100, V-2200, V-2300, V-100-518, V-400-502, V-400-504, V-400-505, V-400-508, and 16-V-15. 	ADEM Admin Code r. 335-3-14-.04 & ADEM Admin Code r. 335-3-11-.06(83)
2. The vent gas combustor shall be properly maintained, controlled, and operated to achieve 99.9% or greater destruction efficiency of all inlet volatile organic compounds.	ADEM Admin Code r. 335-3-14-.04
3. Tank V-400-501 shall not contain volatile organic liquids, which have vapor pressures greater than 1.04 psia.	ADEM Admin Code r. 335-3-14-.04
4. Tanks 16-V-43, 16-V-44, and 16-V-45 shall not contain volatile organic liquids which have vapor pressures greater than 0.01 psia.	ADEM Admin Code r. 335-3-14-.04
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the volatile organic compound emission rates of this unit shall be determined by Reference Method 18 or 25A in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-11-.06(83)

Area 1—Irganox Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
1. The facility shall perform inspections of the vent line header for all tanks which vent to a control device at least once per calendar year not to exceed 15 months between inspections to insure the vent lines are intact and operating properly.	ADEM Admin. Code r. 335-3-14-.04 & 335-3-11-.06(83)
2. The facility shall comply with the monitoring procedures for tanks subject to the MON as listed in 63.2470.	ADEM Admin. Code r. 335-3-14-.04 & 335-3-11-.06(83)
<i>Recordkeeping and Reporting Requirements</i>	
1. Records shall be maintained for all periods of operation during which the vent gas combustor is not in operation for tanks V-50, V-51, V-56, V-2100, V-2200, V-2300, V-100-518, V-400-502, V-400-504, V-400-505, V-400-508, and 16-V-15. Reports of all periods recorded during which the vent gas combustor was down shall be submitted in the semi-annual report.	ADEM Admin Code r. 335-3-14-.04
2. The facility shall follow the recordkeeping and reporting requirements for the equipment subject to the MON, 40 CFR Part 63, Subpart FFFF, as specified in 63.2520 and 63.2525.	ADEM Admin. Code r. 335-3-11-.06(83)
3. Records of the annual inspections of the vent line header for tanks which vent to a control device shall be maintained. These records shall be recorded in a permanent form suitable for inspection and shall be retained for at least five years.	ADEM Admin. Code r. 335-3-14-.04 & 335-3-11-.06(83)
4. The Irganox Unit shall maintain records of all data used to determine MON applicability as outlined in 40 CFR 63.2520(d) of Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)

Area 17--Tinuvins Manufacturing Unit Summary

Description: Tinuvins Manufacturing Unit

Operating Schedule: 8760 hours/year.

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:
40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
17-EP-25 and 17-EP-49	Baghouses	PM	$E = 3.59P^{0.62}$	335-3-4-.04(1)
17-EP-25 and 17-EP-49	Baghouses	Opacity	<20%	335-3-4-.01
17-EP-26 and 17-EP-27	Flare	Opacity	<20%	335-3-4-.01
17-EP-26 and 17-EP-27	Flare	HAP		335-3-11-.06(83)
17-EP-FUG	Fugitives	VOC/HAP	LDAR Program Part 63 Subpart UU	335-3-14-.04 335-3-11-.06(46)

**Area 17-- Tinuvin Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin. Code r. 335-3-16-.03
2. This facility has accepted a requirement to perform a leak detection program equivalent to 40 CFR Part 60, Subpart VV in order to remain minor with respect to PSD. Compliance with 40 CFR Part 63, Subpart UU shall constitute compliance with this requirement.	ADEM Admin. Code r. 335-3-14-.04
3. This unit is subject to 40 CFR Part 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (MON).	ADEM Admin. Code r. 335-3-11-.06(83)
4. This unit is subject to 40 CFR Part 63, Subpart UU – National Emission Standards for Equipment Leaks – Control Level 2 Standards	ADEM Admin. Code r. 335-3-11-.06(46)
5. The unit is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart FFFF or Subpart UU.	ADEM Admin. Code r. 335-3-11-.06(1)
<i>Emission Standards</i>	
1. The particulate matter emissions from emission points 17-EP-25 and 17-EP-49 shall not be exceeded the maximum emission rate of $3.59 * (\text{process rate})^{0.62}$.	ADEM Admin. Code r. 335-3-4-.04(1)
2. Opacity shall not exceed twenty percent (20%) as determined by six-minute average. During one six-minute period in any sixty minute period, this unit may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%).	ADEM Admin. Code r. 335-3-4-.01
3. The facility shall implement and maintain an LDAR Program equivalent to 40 CFR Part 63, Subpart UU, for components in VOC service to remain a minor source with respect to PSD.	ADEM Admin. Code r. 335-3-14-.04

**Area 17-- Tinuvin Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Emission Standards Continued</i>	
4. CFR Part 63, Subpart UU, for components subject to monitoring in accordance with the MON (§63.2480). The facility shall implement and maintain a Leak Detection and Repair (LDAR) Program equivalent to 40	ADEM Admin. Code r. 335-3-11-.06(46)
5. Any emission point in this unit exceeding 0.50 lbs/hr of HAPs or VOCs shall be vented to the main flare, emission point 17-EP-26.	ADEM Admin. Code r. 335-3-14-.04
6. All hydrogenation process vents shall be vented to the hydrogen flare, emission point 17-EP-27.	ADEM Admin. Code r. 335-3-14-.04
7. This unit shall comply with the provisions of 40 CFR Part 63 Subpart FFFF (MON) by venting HAP emissions through a closed vent system to a flare which meets the requirements of §63.982(b).	ADEM Admin. Code r. 335-3-11-.06(83)
<i>Compliance and Performance Test Methods and Procedures</i>	
3. Compliance with the particulate emission rates of this unit shall be determined by Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
4. Compliance with the opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03
5. Compliance with the volatile organic compound and hazardous air pollutant leak emission rates of this unit shall be determined by Reference Method 21 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin. Code r. 335-3-10-.03

**Area 17-- Tinuvin Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
<p>1. Emission points 17-EP-25, 17-EP-26, 17-EP-27 and 17-EP-49 shall be checked for the presence or absence of visible emissions at least once per calendar week while the equipment associated with these points is in operation. If visible emissions are observed during the visible emissions check, a Visual Determination of Opacity shall be performed using EPA Reference Method 9 or corrective action shall be taken within twelve (12) hours. If the Visual Determination of Opacity confirms that the source is discharging particulate emissions above limits specified in Emission Standard 2 of this permit, corrective action will be initiated within twelve (12) hours of discovery to reduce particulate emissions below limits specified.</p>	<p>ADEM Admin. Code r. 335-3-16-.05(c)</p>
<p>2. Whenever this unit is operating, this facility shall operate monitoring equipment that is capable of continuously determining whether the flares are lit.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(83)</p>
<p>3. This facility shall follow monitoring requirements equivalent to those of 40 CFR 63, Subpart UU for components subject to the MON.</p>	<p>ADEM Admin. Code r. 335-3-11-.06(46)</p>
<p>4. This facility shall follow monitoring requirements equivalent to those of 40 CFR Part 63, Subpart UU for components in VOC service.</p>	<p>ADEM Admin. Code r. 335-3-14-.04</p>

**Area 17-- Tinuvin Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements</i>	
<p>1. The facility shall maintain records of its weekly visual inspections of emission points 17-EP-25, 17-EP-26, 17-EP-27 and 17-EP-49. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from any of these points shall be recorded and reported during the semi-annual report. The facility shall keep records of the corrective action taken in the event visible emissions are observed.</p>	ADEM Admin. Code r. 335-3-16-.05(c)
<p>2. The facility shall maintain records of the flame presence for emission points 17-EP-26 and 17-EP-27. The records, which may be in the form of a log or a checklist, shall be kept in a form suitable for inspection for five years. If at any time, the flame is not present due to malfunction and the unit is operating, it shall be recorded and reported during the semi-annual report.</p>	ADEM Admin. Code r. 335-3-11-.06(83)
<p>3. The facility shall follow the recordkeeping and reporting requirements equivalent to those of 40 CFR Part 63, Subpart UU as applicable.</p>	ADEM Admin Code r. 335-3-11-.06(46)
<p>4. The facility shall follow the recordkeeping and reporting requirements for the equipment subject to the MON, 40 CFR Part 63, Subpart FFFF, as specified in 63.2520 and 63.2525.</p>	ADEM Admin. Code r. 335-3-11-.06(83)

Area 17 Storage Tanks Summary

Description: Area 17 Storage Tanks.

Operating Schedule: 8760 hours/year.

These units may be subject to the following NSPSs or MACTs:

40 CFR Part 60, Subpart Kb
40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Tank Number	Size of Tank (gallons)	Material in Tank	Maximum Vapor Pressure (psia)	Control Technique	Standard
17-V-519	15,000	Methanol		Vent to flare	ADEM Admin Code 335-3-11-.06(83)
17-V-520	30,000	Volatile Organic Liquid		Vent to flare	ADEM Admin Code 335-3-11-.06(83) & 335-3-10-.02(9)(b)
17-V-523	15,000	Volatile Organic Liquid		Vent to flare	ADEM Admin Code 335-3-11-.06(83)
17-V-543	15,000	Volatile Organic Liquid	0.41	Vent to flare	ADEM Admin Code 335-3-11-.06(83)
17-V-547	15,000	Methanol		Vent to flare	ADEM Admin Code 335-3-11-.06(83)
17-V-562	15,000	Volatile Organic Liquid	6.40	Vent to flare	
17-V-37	30,000	Volatile Organic Liquid	4.43	Vent to flare	ADEM Admin Code 335-3-11-.06(83) & 335-3-10-.02(9)(b)
17-V-38	15,000	Volatile Organic Liquid	4.43	Vent to flare	ADEM Admin Code 335-3-11-.06(83)
17-V-39	8,000	Volatile Organic Liquid	<0.01	Vent to flare	ADEM Admin Code 335-3-14-.04

Area 17 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
<ol style="list-style-type: none"> 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits. 	ADEM Admin Code r. 335-3-16-.03
<ol style="list-style-type: none"> 2. The following tanks are subject to the Federal New Source Performance Standards as listed in 40 CFR, Part 60, Subpart Kb—Standards of Performance of Volatile Organic Liquid Storage Vessels: <ul style="list-style-type: none"> • 17-V-520 and 17-V-37. 	ADEM Admin Code r. 335-3-10-.02 (9)(b)
<ol style="list-style-type: none"> 3. The following tanks are subject to the National Emission Standards for Hazardous Air Pollutants as listed in 40 CFR Part 63, Subpart FFFF-Miscellaneous Organic Chemical Manufacturing: <ul style="list-style-type: none"> • 17-V-37, 17-V-38, 17-V-519, 17-V-520, 17-V-523, 17-V-543, and 17-V-547. 	ADEM Admin Code r. 335-3-11-.06(83)
<i>Emission Standards</i>	
<ol style="list-style-type: none"> 1. The following tanks are subject to the regulations found in 40 CFR Part 60 Subpart Kb. (40 CFR 60.110b - 60.117b). <ul style="list-style-type: none"> • V-520 and 17-V-37. 	ADEM Admin Code r. 335-3-10-.02 (9)(b)
<ol style="list-style-type: none"> 2. The following tanks shall be vented to the process flare. <ul style="list-style-type: none"> • 17-V-519, 17-V-520, 17-V-523, 17-V-543, 17-V-547, 17-V-562, 17-V-37, 17-V-38, and 17-V-39. 	ADEM Admin Code r. 335-3-14-.04 & ADEM Admin Code r. 335-3-11-.06(83)

Area 17 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards Continued</i>	
3. The flare shall be properly maintained, controlled, and operated to meet the Federal New Source Performance Standards as defined in 40 CFR Part 63.11(b) and 63.982(b).	ADEM Admin Code r. 335-3-14-.04 & 335-3-11-.06(83)
4. Tanks 17-V-37 and 17-V-38 must not contain volatile organic liquids which have vapor pressures greater than 4.43 psia.	ADEM Admin Code r. 335-3-14-.04
5. Tank 17-V-562 must not contain volatile organic liquids, which have vapor pressures greater than 6.40 psia.	ADEM Admin Code r. 335-3-14-.04
6. Tank 17-V-543 must not contain volatile organic liquids, which have vapor pressures greater than 0.41 psia.	ADEM Admin Code r. 335-3-14-.04
7. Tank 17-V-39 must not contain volatile organic liquids, which have vapor pressures greater than 0.01 psia.	ADEM Admin Code r. 335-3-14-.04
8. This unit shall comply with the applicable provisions of 40 CFR Part 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.	ADEM Admin Code r. 335-3-11-.06(83)
<i>Compliance and Performance Test Methods and Procedures</i>	
1. The vapor pressures of the materials stored in the vessels subject to 40 CFR Part 60, Subpart Kb shall be determined as specified in 60.111b.	ADEM Admin Code r. 335-3-10-.02 (9)(b)
2. Compliance with the volatile organic compound emission rates of this unit shall be determined by Reference Method 18 or 25A in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-11-.06(83)
<i>Emission Monitoring</i>	
1. The facility shall comply with the monitoring procedures for tanks subject the 40 CFR Part 60, Subpart Kb as listed in 60.116b.	ADEM Admin Code r. 335-3-10-.02 (9)(b)

Area 17 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring (continued)</i>	
<p>2. The facility shall perform inspections of the vent line header for all tanks which vent to a control device at least once per calendar year not to exceed 15 months between inspections to insure the vent lines are intact and operating properly.</p>	<p>ADEM Admin Code r. 335-3-11-.06(83) & 335-3-14-.04</p>
<i>Recordkeeping and Reporting Requirements</i>	
<p>1. The following tanks are subject to the recordkeeping and reporting requirements found in 40 CFR Part 60 Subpart Kb. (40 CFR 60.115b)</p> <ul style="list-style-type: none"> • 17-V-520 and 17-V-37. 	<p>ADEM Admin Code r. 335-3-10-.02 (9)(b)</p>
<p>2. Records containing the identification of the current type of liquid stored and its maximum true vapor pressure at storage temperature must be maintained for the following tanks and these records must be readily available for inspection at all times and shall be retained for at least five years.</p> <ul style="list-style-type: none"> • V-520 and 17-V-37. 	<p>ADEM Admin Code r. 335-3-10-.02(9)(b)</p>
<p>3. For the following tanks, records of total annual throughput volumes for each liquid stored in these tanks must be maintained. These records shall be recorded in a permanent form suitable for inspection and shall be retained for at least five years.</p> <ul style="list-style-type: none"> • V-520 and 17-V-37. 	<p>ADEM Admin Code r. 335-3-10-.02(9)(b)</p>
<p>4. Records shall be maintained for all periods of operation during which the flares pilot flame is absent for tanks V-519, V-520, V-523, V-543, V-547, 17-V-562 17-V-37, 17-V-38, and 17-V-39. Reports of all periods recorded during which the flare pilot flame was absent shall be submitted in the semi-annual report</p>	<p>ADEM Admin Code r. 335-3-11-.06(83)</p>

**Area 17 Storage Tanks
Provisos**

Federally Enforceable Provisos	Regulations
Recordkeeping and Reporting Requirements Continued	
<p>5. The following tanks shall keep records of the vessel dimensions for each vessel and an analysis of the capacity of each vessel for the life of the vessel.</p> <ul style="list-style-type: none"> • V-520 and 17-V-37. 	ADEM Admin Code r. 335-3-10-.02(9)(b)
<p>6. Records of the annual inspections of the vent line header for tanks which vent to a control device shall be maintained. These records shall be recorded in a permanent form suitable for inspection and shall be retained for at least five years</p>	ADEM Admin. Code r. 335-3-11-.06(83) & 335-3-14-.04
<p>7. The Tinuvins Manufacturing Unit shall maintain records of all data used to determine MON applicability as outlined in 40 CFR 63.2520(d) of Subpart FFFF.</p>	ADEM Admin Code r. 335-3-11-.06(83)

Area 18—Tinuvins Intermediates Unit Summary

Description: Area 18 – Tinuvins Intermediates Unit

Operating Schedule: 8760 hours/year.

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:
40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
18-EP-FUG	Fugitive Emissions	VOC/HAP	LDAR Program Part 63 Subpart UU	335-3-14-.04 335-3-11-.06(83)
18-EP-21	Wet Scrubber	Halogen HAP	≥99% DE or ≤20 ppmv	335-3-11-.06(83)
18-EP-14	Caustic Scrubber	Halogen HAP	Group II	335-3-11-.06(83)
17-EP-26	Flare	Opacity	<20%	335-3-4-.01
17-EP-26	Flare	HAP		335-3-11-.06(83)

**Area 18-- Tinuvins Intermediates Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin Code r. 335-3-16-.03
2. This facility has accepted a requirement to perform a leak detection program equivalent to 40 CFR Part 60, Subpart VV. Compliance with 40 CFR Part 63, Subpart UU shall constitute compliance with this requirement.	ADEM Admin Code r. 335-3-14-.04
3. This unit is subject to the provisions of 40 CFR Part 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.	ADEM Admin Code r. 335-3-11-.06(83)
4. This unit is subject to 40 CFR Part 63, Subpart UU – National Emission Standards for Equipment Leaks – Control Level 2 Standards	ADEM Admin Code r. 335-3-11-.06(46)
5. The unit is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart FFFF or Subpart UU.	ADEM Admin Code r. 335-3-11-.06(1)
<i>Emission Standards</i>	
1. The facility shall implement and maintain an LDAR Program equivalent to 40 CFR Part 63, Subpart UU, for components in VOC service to remain a minor source with respect to PSD.	ADEM Admin Code r. 335-3-14-.04
2. The facility shall implement and maintain a Leak Detection and Repair (LDAR) Program equivalent to 40 CFR Part 63, Subpart UU, for components subject to monitoring in accordance with the MON (§63.2480).	ADEM Admin Code r. 335-3-11-.06(46)
3. The wet scrubber, 18-EP-21, of this unit shall be properly maintained, controlled, and operated to achieve an outlet concentration of ≤ 20 ppmv halogen HAP, or a destruction efficiency of $\geq 99\%$ for halogen HAP, in accordance with the requirements of 40 CFR Part 63, Subpart FFFF.	ADEM Admin Code r. 335-3-11-.06(83)

**Area 18-- Tinuvin Intermediates Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the volatile organic compound and hazardous air pollutant emission rates for leaks of this unit shall be determined by Reference Method 21 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
2. Compliance with the halogen HAP emission rates for this unit shall be determined by Reference Method 26 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
<i>Emission Monitoring</i>	
1. The facility shall follow the applicable monitoring requirements for the MON in accordance with 40 CFR Part 63, Subpart FFFF.	ADEM Admin. Code r. 335-3-11-.06(83)
2. This facility shall follow monitoring requirements equivalent to those of 40 CFR 63, Subpart UU for components subject to the MON.	ADEM Admin Code r. 335-3-11-.06(46)
3. This facility shall follow monitoring requirements equivalent to those of 40 CFR Part 63, Subpart UU for components in VOC service.	ADEM Admin Code r. 335-3-14-.04
4. In order to ensure that emission point 18-EP-21 is in compliance with its emission limit, the facility shall maintain a scrubber water flow ≥ 2 gpm, or greater than or equal to the flow utilized during the most recent demonstration of compliance with applicable emission limits. These parameters shall be measured and recorded at least every 15 minutes.	ADEM Admin Code r. 335-3-11-.06(83)

**Area 18-- Tinuvin Intermediates Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements</i>	
1. The facility shall follow the recordkeeping and reporting requirements equivalent to those of 40 CFR Part 63, Subpart UU as applicable.	ADEM Admin Code r. 335-3-11-.06(46)
2. The facility shall maintain hourly rolling averages and daily averages of the flowrates for the scrubber 18-EP-21.	ADEM Admin Code r. 335-3-11-.06(83)
3. The facility shall follow the recordkeeping and reporting requirements for the equipment subject to the MON, 40 CFR Part 63, Subpart FFFF, as specified in 63.2520 and 63.2525.	ADEM Admin Code r. 335-3-11-.06(83)
4. Records of the Group II determination for scrubber, 18-EP-14, shall be maintained in accordance with the MON, as specified in 63.2525(e).	ADEM Admin Code r. 335-3-11-.06(83)

Area 18 Storage Tanks Summary

Description: Area 18 Storage Tanks.

Operating Schedule: 8760 hours/year.

These units may be subject to the following NSPSs or MACTs:
40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Tank No.	Capacity (gallons)	Material Stored	Control Technique	Standard
18-V-2	30,000	Halogen HAP	Vent to Water Scrubber (18-EP-21)	335-3-11-.06(83)
18-V-10	15,000	Volatile Organic Liquid	Vent to Flare (17-EP-26)	335-3-11-.06(83)
18-V-29	11,000	Halogen HAP	Vent to Water Scrubber (18-EP-21)	335-3-11-.06(83)
18-V-38	15,000	Volatile Organic Liquid	Vent to Flare (17-EP-26)	335-3-11-.06(83)
18-V-47	15,000	Volatile Organic Liquid	Vent to Flare (17-EP-26)	335-3-11-.06(83)
18-V-2774	15,000	Volatile Organic Liquid	Vent to Flare (17-EP-26)	335-3-11-.06(83)
18-V-2775	15,000	Volatile Organic Liquid	Vent to Flare (17-EP-26)	335-3-11-.06(83)
18-V-2778	15,000	Volatile Organic Liquid	Vent to Flare (17-EP-26)	335-3-11-.06(83)

Area 18 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin Code r. 335-3-16-.03
2. The following tanks are subject to 40 CFR Part 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing:	ADEM Admin Code r. 335-3-11-.06(83)
18-V-2 18-V-47	
18-V-10 18-V-2774	
18-V-29 18-V-2775	
18-V-38 18-V-2778	
3. The following tanks are subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart FFFF.	ADEM Admin Code r. 335-3-11-.06(1)
18-V-2 18-V-47	
18-V-10 18-V-2774	
18-V-29 18-V-2775	
18-V-38 18-V-2778	
4. This source is subject to anti-PSD emission limitations.	ADEM Admin Code r. 335-3-14-.04
<i>Emission Standards</i>	
1. The following tanks are Group 1 storage tanks as defined in §63.2550:	ADEM Admin Code r. 335-3-11-.06(83)
18-V-2 18-V-47	
18-V-10 18-V-2778	
18-V-29	
2. The following tanks are Group 2 storage tanks as defined in §63.2550:	ADEM Admin Code r. 335-3-11-.06(83)
18-V-10 18-V-2774	
18-V-38 18-V-2775	
18-V-47 18-V-2778	

Area 18 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations						
<i>Emission Standards continued</i>							
<p>3. The following tanks shall be vented to Flare (17-EP-26) for control:</p> <table style="margin-left: 40px; border: none;"> <tr> <td style="padding-right: 40px;">18-V-10</td> <td>18-V-2774</td> </tr> <tr> <td>18-V-38</td> <td>18-V-2775</td> </tr> <tr> <td>18-V-47</td> <td>18-V-2778</td> </tr> </table>	18-V-10	18-V-2774	18-V-38	18-V-2775	18-V-47	18-V-2778	<p>ADEM Admin Code r. 335-3-11-.06(83) & 335-3-14-.04</p>
18-V-10	18-V-2774						
18-V-38	18-V-2775						
18-V-47	18-V-2778						
<p>4. The following tanks shall be vented to Water Scrubber (18-EP-21) for control:</p> <table style="margin-left: 40px; border: none;"> <tr> <td style="padding-right: 40px;">18-V-2</td> <td>18-V-29</td> </tr> </table>	18-V-2	18-V-29	<p>ADEM Admin Code r. 335-3-11-.06(83)</p>				
18-V-2	18-V-29						
<p>5. As referenced in §63.2450(e)(2), §63.982(b) requires the flare to be properly maintained, controlled, and operated to meet the Federal New Source Performance Standards as defined in §63.982(b) and §63.11(b).</p>	<p>ADEM Admin Code r. 335-3-11-.06(83) & 335-3-14-.04</p>						
<p>6. In accordance with §63.2470(a), the Water Scrubber (18-EP-21) shall be properly maintained, controlled, and operated to reduce collective halogen HAP emissions by $\geq 95\%$ or to an outlet concentration of ≤ 20 ppmv, as indicated in Table 4 of Subpart FFFF.</p>	<p>ADEM Admin Code r. 335-3-11-.06(83)</p>						
<i>Compliance and Performance Test Methods and Procedures</i>							
<p>1. Compliance with the halogen HAP standard for this unit shall be determined by Reference Method 26A in Appendix A of 40 CFR Part 60. Alternate test methods may be used provided prior approval by the Department is granted.</p>	<p>ADEM Admin Code r. 335-3-10-.03</p>						

Area 18 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
1. In order to ensure that the Water Scrubber (18-EP-21) maintains the halogen HAP emission limitation, as indicated in Table 4 of Subpart FFFF, the facility shall continuously monitor the flowrate of the scrubber influent. A reading should be measured and recorded at least once every 15 minutes.	ADEM Admin Code r. 335-3-11-.06(83)
2. The flowrate of the scrubber influent shall be maintained at ≥ 2 gpm, or greater than or equal to the value established utilizing engineering analysis, stack test data, or operational data that indicated compliance with the halogen HAP emission limit.	ADEM Admin Code r. 335-3-11-.06(83)
3. The facility shall perform inspections of the vent line header for all tanks which vent to a control device at least once per calendar year not to exceed 15 months between inspections to ensure the vent lines are intact and operating properly.	ADEM Admin Code r. 335-3-14-.04
4. As referenced in §63.2450(e)(2), §63.987(c) requires the facility to install a device capable of continuously detecting the presence of a pilot flame on Flare (17-EP-26).	ADEM Admin Code r. 335-3-11-.06(83) & 335-3-14-.04
<i>Recordkeeping and Reporting Requirements</i>	
1. Records of the hourly rolling average and the daily average of the influent flowrate for the Water Scrubber (18-EP-21) shall be maintained and be readily available for inspection for a period of five years.	ADEM Admin Code r. 335-3-11-.06(83)
2. Records of the annual inspections of the vent line header for tanks which vent to a control device shall be maintained. These records shall be recorded in a permanent form suitable for inspection and shall be retained for at least five years.	ADEM Admin Code r. 335-3-14-.04

Area 18 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations						
<i>Recordkeeping and Reporting Requirements continued</i>							
<p>3. Records for all periods of operation during which the flare's pilot flame is absent for the following tanks. Reports of all periods recorded during which the flare pilot flame was absent shall be submitted in the semiannual report.</p> <table style="margin-left: 40px;"> <tr> <td>18-V-10</td> <td>18-V-2774</td> </tr> <tr> <td>18-V-38</td> <td>18-V-2775</td> </tr> <tr> <td>18-V-47</td> <td>18-V-2778</td> </tr> </table>	18-V-10	18-V-2774	18-V-38	18-V-2775	18-V-47	18-V-2778	<p>ADEM Admin Code r. 335-3-11-.06(83) & 335-3-14-.04</p>
18-V-10	18-V-2774						
18-V-38	18-V-2775						
18-V-47	18-V-2778						
<p>4. Records 4 shall be maintained for all periods of operation during which the Water Scrubber (18-EP-21) is not in operation for the following tanks.</p> <table style="margin-left: 40px;"> <tr> <td>18-V-2</td> <td>18-V-29</td> </tr> </table>	18-V-2	18-V-29	<p>ADEM Admin Code r. 335-3-11-.06(83)</p>				
18-V-2	18-V-29						
<p>5. The facility shall follow the recordkeeping and reporting requirements for the equipment subject to 40 CFR Part 63, Subpart FFFF, as specified in §63.2520 and §63.2525.</p>	<p>ADEM Admin Code r. 335-3-11-.06(83)</p>						
<p>6. The Area 18 Production Unit shall maintain records of all data used to determine MON applicability as outlined in 40 CFR 63.2520(d) of Subpart FFFF.</p>	<p>ADEM Admin Code r. 335-3-11-.06(83)</p>						

Area 20--Additives Manufacturing Unit Summary

Description: Area 20 – Additives Manufacturing Unit

Operating Schedule: 8760 hours/year.

This unit contains equipment that is subject to the following NSPSs, NESHAPs, or MACTs:
40 CFR Part 63, Subpart FFFF

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
20-EP-S4, 20-EP-S5, and 20-EP-S8	Baghouses	PM	$E = 3.59P^{0.62}$	335-3-4-.04(1)
20-EP-S4, 20-EP-S5, and 20-EP-S8	Baghouses	Opacity	<20%	335-3-4-.01
20-EP-26	Flare	VOC	≤ 11.0 MMlbs/yr G-19-675	335-3-14-.04
20-EP-26	Flare	Opacity	<20%	335-3-4-.01
20-EP-26	Flare	HAP		335-3-11-.06(83)
20-EP-28	Scrubber	Non-HAP VOC	1.05 lb/hr	335-3-14-.04
20-EP-29	Scrubber	Cyanuric Chloride Particulate	$E = 3.59P^{0.62}$	335-3-4-.04(1)
20-EP-FUG	Fugitives	VOC/HAP	LDAR Program Part 63 Subpart UU	335-3-14-.04 335-3-11-.06(83)

**Area 20--Additives Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin Code r. 335-3-16-.03
2. This facility has accepted a requirement to perform a leak detection program equivalent to 40 CFR Part 63, Subpart UU in order to remain minor with respect to PSD.	ADEM Admin Code r. 335-3-14-.04
3. This unit is subject to 40 CFR Part 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (MON).	ADEM Admin Code r. 335-3-11-.06(83)
4. This unit is subject to 40 CFR Part 63, Subpart UU – National Emission Standards for Equipment Leaks – Control Level 2 Standards	ADEM Admin Code r. 335-3-11-.06(46)
5. The unit is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart FFFF or Subpart UU.	ADEM Admin Code r. 335-3-11-.06(1)
<i>Emission Standards</i>	
1. The particulate matter emissions from emission points 20-EP-S4, 20-EP-S5, 20-EP-S8, 20-EP-28, and 20-EP-29 shall not exceed the maximum emission rate of $3.59 * (\text{process rate})^{0.62}$.	ADEM Admin Code r. 335-3-4-.04(1)
2. Opacity shall not exceed twenty percent (20%) as determined by six-minute average. During one six-minute period in any sixty minute period, this unit may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%).	ADEM Admin Code r. 335-3-4-.01
3. The facility shall implement a Leak Detection and Repair (LDAR) Program equivalent to 40 CFR Part 63, Subpart UU.	ADEM Admin Code r. 335-3-14-.04 & 335-3-11-.06(83)

**Area 20--Additives Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Emission Standards Continued</i>	
4. The flare for this unit shall comply with requirements as specified in 40 CFR 63.11(b).	ADEM Admin Code r. 335-3-14-.04 & 335-3-11-.06(83)
5. Such that the major modification threshold for the Prevention of Significant Deterioration (PSD) regulations shall not be exceeded, the following standards shall apply: <ul style="list-style-type: none"> • This facility shall operate the scrubbers, emission points 20-EP-28 and 20-EP-29, above minimum limits set by the manufacturer or as determined by initial compliance tests or subsequence test such that the emission rates shall be controlled. • This unit shall limit the production of G-19-675 to 11.0-MM lbs. per rolling twelve-month period. 	ADEM Admin Code r. 335-3-14-.04
6. This unit shall comply with the provisions of 40 CFR Part 63 Subpart FFFF (MON) by venting HAP emissions through a closed vent system to a flare which meets the requirements of §63.982(b).	ADEM Admin. Code r. 335-3-11-.06(83)

**Area 20--Additives Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the particulate emission rates of this unit shall be determined by Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
2. Compliance with the opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
3. Compliance with the volatile organic compound and hazardous air pollutant leak emission rates of this unit shall be determined by Reference Method 21 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
<i>Emission Monitoring</i>	
1. Emission points 20-EP-04, 20-EP-05, and 20-EP-08 shall be checked for the presence or absence of visible emissions at least once per calendar week while the equipment associated with these points is in operation. If visible emissions are observed during the visible emissions check, a Visual Determination of Opacity shall be performed using EPA Reference Method 9 or corrective action shall be taken within twelve (12) hours. If the Visual Determination of Opacity confirms that the source is discharging particulate emissions above limits specified in Emission Standard 2 of this permit, corrective action will be initiated within twelve (12) hours of discovery to reduce particulate emissions below limits specified.	ADEM Admin Code r. 335-3-16-.05(c)

**Area 20--Additives Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring Continued</i>	
2. This facility shall follow monitoring requirements equivalent to those of 40 CFR 63, Subpart UU.	ADEM Admin Code r. 335-3-11-.06(46)
3. A flow indicator shall be installed at the flare, emission point 20-EP-26, and shall operate according to manufacturer's specifications. This indicator shall be used to provide a record of the vent stream flow to the flare at least once per hour. The facility must install, calibrate, maintain, and operate, according to the manufacturer's specifications, a heat-sensing device at the pilot light of the flare to indicate the continuous presence of a flame. The flare for this unit shall comply with requirements as specified in 40 CFR 63.11(b) and 63.982(b).	ADEM Admin Code r. 335-3-11-.06(83)
4. A monitoring device for the continuous measurements of the pressure drop of the gas stream through the scrubbers, emission points 20-EP 28 and 20-EP-29, shall be installed and measurements recorded at least once per hour. The monitoring device shall be accurate within ± 250 Pascal's (one inch of water).	ADEM Admin Code r. 335-3-14-.04
5. Whenever this unit produces product G-19-675, the facility shall monitor the production of G-19-675 per day in lb/day in order to determine compliance with the production limit of 11.0 MMlb/twelve month period of G-19-675.	ADEM Admin Code r. 335-3-14-.04

**Area 20--Additives Manufacturing Unit
Provisos**

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements</i>	
1. The facility shall maintain records of its weekly visual inspections of emission points 20-EP-04, 20-EP-05, and 20-EP-08. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from any of these points shall be recorded and reported in the semi-annual report. The facility shall keep records of the corrective action taken in the event visible emissions are observed.	ADEM Admin Code r. 335-3-16-.05(c)
2. The facility shall maintain records of the flame presence and hourly vent flows for emission point 20-EP-26. The records, which may be in the form of a log or a checklist, shall be kept in a form suitable for inspection for five years. If at any time, the flame is not present due to malfunction and the unit is operating, it shall be recorded and reported during the semi-annual report.	ADEM Admin Code r. 335-3-11-.06(83)
3. The facility shall follow the recordkeeping and reporting requirements equivalent to those of 40 CFR Part 63, Subpart UU.	ADEM Admin Code r. 335-3-11-.06(46)
4. The facility shall maintain records of the pressure loss of the gas stream through the scrubbers. These records shall be maintained for a minimum of 5 years.	ADEM Admin Code r. 335-3-14-.04
5. The facility shall maintain records for the production of G-19-675, and total production of G-19-675 must be calculated on a rolling twelve month period. The records, which may be in the form of a log or a checklist, shall be kept in a form suitable for inspection for five years.	ADEM Admin Code r. 335-3-14-.04
6. The facility shall follow the recordkeeping and reporting requirements for the equipment subject to the MON, 40 CFR Part 63, Subpart FFFF, as specified in 63.2520 and 63.2525.	ADEM Admin Code r. 335-3-11-.06(83)

Area 20 Storage Tanks Summary

Description: Area 20 Storage Tanks.

Operating Schedule: 8760 hours/year.

These units may be subject to the following NSPSs or MACTs:

40 CFR Part 60 Subpart Kb

40 CFR Part 63 Subpart FFFF

Pollutants Emitted

Tank Number	Size of Tank (gallons)	Material in Tank	Maximum Vapor Pressure (psia)	Control Technique	Standard
V-1100	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-1120	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-1130	7,500	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-1140	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-1150	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-1160	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-1170	7,500	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-1180	15,000	Volatile Organic Liquid	0.02		ADEM Admin Code 335-3-14-.04
V-1190	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-1220	30,000	Volatile Organic Liquid	0.02		ADEM Admin Code 335-3-14-.04
V-1230	30,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-11-.06(83) & 335-3-10-.02(9)(b)
V-1240	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-11-.06(83)
V-1250	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-11-.06(83)
V-1280	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-1290	15,000	Volatile Organic Liquid	1.79	Vent to flare	ADEM Admin Code 335-3-11-.06(83)
V-1300	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-11-.06(83)
V-1320	7,500	T-7 Amine		Vent to flare	ADEM Admin Code 335-3-14-.04
V-1330	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03

Area 20 Storage Tanks Summary

Pollutants Emitted Continued

Tank Number	Size of Tank (gallons)	Material in Tank	Maximum Vapor Pressure (psia)	Control Technique	Standard
V-1340	7,500	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-11-.06(83)
V-1350	15,000	Volatile Organic Liquid	0.02		ADEM Admin Code 335-3-14-.04
V-1360	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-11-.06(83)
V-1370	15,000	Volatile Organic Liquid	5.10	Vent to flare	ADEM Admin Code 335-3-6-.03
V-3120	30,000	Volatile Organic Liquid			40 CFR Part 60 Subpart Kb
18-V-2779	15,000	Methanol		Vent to flare (17-EP-29)	ADEM Admin Code 335-3-11-.06(83)

Area 20 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
<p>1. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.</p>	ADEM Admin Code r. 335-3-16-.03
<p>2. These sources are subject to the provisions of 40 CFR Part 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.</p>	ADEM Admin Code r. 335-3-11-.06 (83)
<p>3. The following tank is subject to the Federal New Source Performance Standards as listed in 40 CFR, Part 60, Subpart Kb—Standards of Performance of Volatile Organic Liquid Storage Vessels:</p> <ul style="list-style-type: none"> • V-3120 and V-1230 	ADEM Admin Code r. 335-3-10-.02 (9)(b)
<p>4. The following tanks are subject to ADEM Administrative Code R. 335-3-6-.03.</p> <ul style="list-style-type: none"> • V-1100, V-1120, V-1130, V-1140, V-1150, V-1160, V-1170, V-1190, V-1280, V-1330, and V-1370. 	ADEM Admin Code r. 335-3-6-.03
<p>5. The following tanks are subject to the National Emission Standards for Hazardous Air Pollutants as listed in 40 CFR Part 63, Subpart FFFF-Miscellaneous Organic Chemical Manufacturing:</p> <ul style="list-style-type: none"> • V-1230, V-1240, V-1250, V-1300, V-1360, V-1340, V-1290, and 18-V-2779. 	ADEM Admin Code r. 335-3-11-.06(83)
<i>Emission Standards</i>	
<p>1. The following tank is subject to the regulations found in 40 CFR Part 60 Subpart Kb. (40 CFR 60.110b - 60.117b).</p> <ul style="list-style-type: none"> • V-3120 and V-1230 	ADEM Admin Code r. 335-3-10-.02 (9)(b)

Area 20 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards continued</i>	
<p>2. The following tanks shall be vented to the process flare.</p> <ul style="list-style-type: none"> • V-1100, V-1120, V-1130, V-1140, V-1150, V-1160, V-1170, V-1190, V-1230, V-1240, V-1250, V-1280, V-1290, V-1300, V-1320, V-1330, V-1340, V-1360, and V-1370. 	ADEM Admin Code r. 335-3-14-.04 & 335-3-11-.06(83)
<p>3. Tank 18-V-2779 shall be vented to the Main Flare (17-EP-26).</p>	ADEM Admin Code r. 335-3-14-.04 & 335-3-11-.06(83)
<p>4. The flare shall be properly maintained, controlled, and operated to meet the Federal New Source Performance Standards as defined in 40 CFR Part 63.11(b) and 63.982(b).</p>	ADEM Admin Code r. 335-3-14-.04 & 335-3-11-.06(83)
<p>5. The following tanks shall not contain volatile organic liquids which have vapor pressures greater than 5.10 psia:</p> <ul style="list-style-type: none"> • V-1100, V-1120, V-1130, V-1140, V-1150, V-1160, V-1170, V-1190, V-1230, V-1240, V-1250, V-1280, V-1300, V-1330, V-1340, V-1360, and V-1370. 	ADEM Admin Code r. 335-3-14-.04
<p>6. Tank V-1290 shall not contain volatile organic liquids which have vapor pressures greater than 1.79 psia.</p>	ADEM Admin Code r. 335-3-14-.04
<p>7. Tanks V-1180, V-1220, and V-1350 shall not contain volatile organic liquids which have vapor pressures greater than 0.02 psia.</p>	ADEM Admin Code r. 335-3-14-.04
<i>Compliance and Performance Test Methods and Procedures</i>	
<p>1. The vapor pressures of the materials stored in the vessels subject to 40 CFR Part 60, Subpart Kb shall be determined as specified in 60.111b.</p>	ADEM Admin Code r. 335-3-10-.02 (9)(b)
<p>2. Compliance with the volatile organic compound emission rates of this unit shall be determined by Reference Method 18 or 25A in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.</p>	ADEM Admin Code r. 335-3-10-.03

Area 20 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
1. The facility shall comply with the monitoring procedures for the tank subject the 40 CFR Part 60, Subpart Kb as listed in 60.116b.	ADEM Admin Code r. 335-3-10-.02 (9)(b)
2. The facility shall perform inspections of the vent line header for all tanks which vent to a control device at least once per calendar year not to exceed 15 months between inspections to insure the vent lines are intact and operating properly.	ADEM Admin Code r. 335-3-11-.06(83) & 335-3-14-.04
<i>Recordkeeping and Reporting Requirements</i>	
1. The following tank is subject to the recordkeeping and reporting requirements found in 40 CFR Part 60 Subpart Kb. (40 CFR 60.115b) <ul style="list-style-type: none"> • V-3120 and V-1230 	ADEM Admin Code r. 335-3-10-.02 (9)(b)
2. Records containing the identification of the current type of liquid stored and its maximum true vapor pressure at storage temperature shall be maintained for the following tank and these records shall be readily available for inspection at all times and shall be retained for at least five years. <ul style="list-style-type: none"> • V-3120 and V-1230 	ADEM Admin Code r. 335-3-10-.02(9)(b)
3. For the following tank, records of total annual throughput volumes for each liquid stored in this tank shall be maintained. These records shall be recorded in a permanent form suitable for inspection and shall be retained for at least five years. <ul style="list-style-type: none"> • V-3120 and V-1230 	ADEM Admin Code r. 335-3-10-.02(9)(b)

Area 20 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements continued</i>	
<p>4. Records shall be maintained for all periods of operation during which the flares pilot flame is absent for V-1100, V-1120, V-1130, V-1140, V-1150, V-1160, V-1170, V-1190, V-1230, V-1240, V-1250, V-1280, V-1290, V-1300, V-1320, V-1330, V-1340, V-1360, V-1370, and 18-V-2779. Reports of all periods recorded during which the flare pilot flame was absent shall be submitted in the semi-annual report.</p>	ADEM Admin Code r. 335-3-11-.06(83)
<p>5. The following tank shall keep records of the vessel dimensions and an analysis of the capacity of each vessel for the life of the vessel.</p> <ul style="list-style-type: none"> • V-3120 and V-1230 	ADEM Admin Code r. 335-3-10-.02(9)(b)
<p>6. Records of the annual inspections of the vent line header for tanks which vent to a control device shall be maintained. These records shall be recorded in a permanent form suitable for inspection and shall be retained for at least five years.</p>	ADEM Admin Code r. 335-3-11-.06(83) & 335-3-14-.04
<p>7. The Area 20 Production unit shall maintain records of all data used to determine MON applicability as outlined in 40 CFR 63.2520(d) of Subpart FFFF.</p>	ADEM Admin Code r. 335-3-11-.06(83)

Area 15 Storage Tank Summary

Description: Area 15 Storage Tanks.

Operating Schedule: 8760 hours/year.

These units may be subject to the following NSPSs or MACTs:

NA

Pollutants Emitted

Tank Number	Size of Tank (gallons)	Material in Tank	Maximum Vapor Pressure (psia)	Control Technique	Standard
15-V-94	14,000	36 % HCl		Wet Scrubber	

Area 15 Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin Code r. 335-3-16-.03
<i>Emission Standards</i>	
1. Tank V-94 shall be vented to the process scrubber.	ADEM Admin Code r. 335-3-16-.05(c)
<i>Recordkeeping and Reporting Requirements</i>	
1. Records shall be maintained for all periods of operation during which the process scrubber was not in operation for tank V-94. Reports of all periods recorded during which the process scrubbers were not in operation shall be submitted in the semi-annual report	ADEM Admin Code r. 335-3-16-.05(c)

Rental Boiler Summary

Description: 99.9 MMBtu/hr Natural Gas Fired Boiler with low NO_x burners

Installation Date: 2016

Operating Schedule: 8,760 hours/year

This unit contains equipment that is subject to the following NSPS's, NESHAP's, or MACT's:

40 CFR Part 60, Subpart Dc

40 CFR Part 63, Subpart DDDDD

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Standard
Rental Boiler	99.9 MMBtu/hr Boiler	PM	$E=1.38(H)^{0.44}$	Rule 335-3-4-.03(4)
Rental Boiler	99.9 MMBtu/hr Boiler	NO _x	0.1 lb/MMBtu	Rule 335-3-10-.02(1)
Rental Boiler	99.9 MMBtu/hr Boiler	SO ₂	1.8 lb/MMBu	Rule 335-3-5-.01(1)(b)
Rental Boiler	99.9 MMBtu/hr Boiler	Opacity	20% opacity (6-minute average) and 40% opacity (no more than one 6-minute average in any 60-minute period)	Rule 335-3-4-.01

Rental Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin Code r. 335-3-4-.01
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03, Control of Particulate Emissions – Fuel Burning Equipment	ADEM Admin Code r. 335-3-4-.03
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin Code r. 335-3-5-.01(1)(a)
5. This source is subject to 40 CFR Part 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.	ADEM Admin Code r. 335-3-10-.02(2)(c)
6. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart Dc.	ADEM Admin Code r. 335-3-10-.02(1)
7. This source is subject to 40 CFR Part 63, Subpart DDDDD – Emission Standards for Hazardous Air Pollutants for Major Sources: Commercial, Industrial, and Institutional Boilers and Process Heaters as a Gas 1 Boiler.	ADEM Admin Code r. 335-3-11-.06(107)
8. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	ADEM Admin Code r. 335-3-11-.06(1)

Rental Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards</i>	
1. Particulate matter (PM) emissions from this unit shall not exceed the maximum emission rate of 1.38(Heat Input in MMBTU/hr) ^{-0.44}	ADEM Admin Code r. 335-3-4-.03
2. Such that the standards of 40 CFR Part 60 Subpart Dc shall be met, the opacity from this shall not exceed 20% as determined by a six-minute average, except for one 6-minute period in any sixty-minute period of not greater than 27%.	ADEM Admin Code r. 335-3-10-.02(2)(c)
3. The sulfur dioxide (SO ₂) emission rate from this source shall not exceed 1.8 lb/MMBtu.	ADEM Admin Code r. 335-3-5-.01(1)(a)
4. Such that the standards of 40 CFR Part 60 Subpart Dc shall be met, NO _x emissions shall not exceed 0.1 lb/MMBtu of heat input.	ADEM Admin Code r. 335-3-10-.02(2)(c)
5. This unit shall be classified at a Gas 1 Unit as defined in 40 CFR Part 63, Subpart DDDDD. In order to maintain this classification this unit is limited to firing natural gas only.	ADEM Admin Code r. 335-3-11-.06(107)
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
2. Compliance with the NO _x standard for this unit shall be determined by Reference Method 7 or 7E in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
3. Compliance with the PM emission rates of this unit shall be determined by Reference Method 5 or 17 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03

Rental Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures continued</i>	
4. Compliance with the sulfur dioxide (SO ₂) emission rates shall be determined by EPA Reference Method 6 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
<i>Emission Monitoring</i>	
1. At any time, should visible emissions be observed from this source by plant personnel or a representative of the Department, action to correct this problem should be initiated within 4 hours. Records of each occurrence of observed visible emissions shall be maintained in a logbook suitable for inspection by the Department and should include the findings of the incident and what action was taken to correct the problem.	ADEM Admin Code r. 335-3-16-.05(c)
2. This unit shall meet the annual tune-up requirements found in Table 3 of 40 CFR Part 63, Subpart DDDDD as referenced in §63.7540 (a).	ADEM Admin Code r. 335-3-11-.06(107)
<i>Recordkeeping and Reporting Requirements</i>	
1. The presence of any visible emissions from this unit shall be recorded. The facility shall keep records of the corrective action taken in the event visible emissions are observed. The records, which me in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from this source shall be recorded and reported in the semi-annual report.	ADEM Admin Code r. 335-3-16-.05(c)
2. The facility shall maintain the records required under 40 CFR 63.7555(a) concerning initial notification.	ADEM Admin Code r. 335-3-11-.06(107)
3. An annual compliance report shall be submitted in accordance with the requirements found in 40 CFR 63.7550(b).	ADEM Admin Code r. 335-3-11-.06(107)

No. 4 Boiler Summary

Description: 86 MMBtu/hr Natural Gas Fired Boiler

Installation Date: 1990

Operating Schedule: 8,760 hours/year

This unit contains equipment that is subject to the following NSPS's, NESHAP's, or MACT's:

40 CFR Part 60, Subpart Dc

40 CFR Part 63, Subpart DDDDD

Pollutants Emitted

Emission Point No.	Point Description	Pollutant	Emission Limit	Standard
No. 4 Boiler	86 MMBtu/hr Boiler	PM	0.19 lb/MMBtu	Rule 335-3-4-.03 & Rule 335-3-14-.04
No. 4 Boiler	86 MMBtu/hr Boiler	SO ₂	1.8 lb/MMBtu	Rule 335-3-5-.01(1)(b)
No. 4 Boiler	86 MMBtu/hr Boiler	NO _x	8.61 lb/hr or 0.1 lb/MMBtu	Rule 335-3-14-.04
No. 4 Boiler	86 MMBtu/hr Boiler	Opacity	20% opacity (6-minute average) and 40% opacity (no more than one 6-minute average in any 60-minute period)	Rule 335-3-4-.01

No. 4 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin Code r. 335-3-4-.01
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03, Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin Code r. 335-3-4-.03
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin Code r. 335-3-5-.01(1)(b)
5. Boiler No. 4 is subject to 40 CFR Part 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.	ADEM Admin Code r. 335-3-10-.02(2)(c)
6. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart Dc.	ADEM Admin Code r. 335-3-10-.02(1)
7. Boiler No. 4 is subject to 40 CFR Part 63, Subpart DDDDD – Emission Standards for Hazardous Air Pollutants for Major Sources: Commercial, Industrial, and Institutional Boilers and Process Heaters.	ADEM Admin Code r. 335-3-11-.06(107)
8. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	ADEM Admin Code r. 335-3-11-.06(1)
9. This source is subject to synthetic minor PSD emission limitations	ADEM Admin Code r. 335-3-14-.04

No. 4 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards</i>	
1. This source shall not discharge into the atmosphere, particulate of an opacity greater than 20% as determined by a six-minute average, except for one 6-minute period in any sixty-minute period of not greater than 40%.	ADEM Admin Code r. 335-3-4-.01
2. The particulate matter (PM) emissions from this unit shall not exceed the maximum emission rate of 1.38(Heat Input in MMBTU/hr) ^{-0.44} .	ADEM Admin Code r. 335-3-4-.03
3. The sulfur dioxide (SO ₂) emission rate from this source shall not exceed 1.8 lb/MMBtu.	ADEM Admin Code r. 335-3-5-.01(1)(b)
4. Such that the major modification threshold for the Prevention of Significant Deterioration (PSD) regulations shall not be exceeded, the following standards shall apply: <ul style="list-style-type: none"> • When firing this unit with natural gas the NO_x emissions shall not exceed 0.1 lb/MMBTU of heat input and 8.61 lb/hr as measured in accordance with 40 CFR Part 60 Method 7 or 7E. 	ADEM Admin Code r. 335-3-14-.04
5. This unit shall be classified at a Gas 1 Unit as defined in 40 CFR Part 63, Subpart DDDDD. In order to maintain this classification this unit is limited to firing natural gas only.	ADEM Admin Code r. 335-3-11-.06(107)

No. 4 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
2. Compliance with the NO _x standard for this unit shall be determined by Reference Method 7 or 7E in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
3. Compliance with the PM emission rates of this unit shall be determined by Reference Method 5 or 17 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
4. Compliance with the sulfur dioxide (SO ₂) emission rates shall be determined by EPA Reference Method 6 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03

No. 4 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
<p>1. As indicated in Table 3 of 40 CFR Part 63, Subpart DDDDD, for existing units with a continuous oxygen trim system, a tune-up of the boiler shall be conducted every five (5) years as referenced in §63.7540(12). The results of the tune-up shall be consistent with the nitrogen oxides (NO_x) anti-PSD limit.</p>	<p>ADEM Admin Code r. 335-3-11-.06(107)</p>
<p>2. At any time, should visible emissions be observed from Boiler No. 4 by plant personnel or a representative of the Department, action to correct this problem should be initiated within 4 hours. Records of each occurrence of observed visible emissions shall be maintained in a logbook suitable for inspection by the Department and should include the findings of the incident and what action was taken to correct the problem.</p>	<p>ADEM Admin Code r. 335-3-16-.05(c)</p>

No. 4 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements</i>	
1. The total amount of natural gas combusted in this source shall be recorded during each calendar month as indicated in §60.48c(g)(2).	ADEM Admin Code r. 335-3-10-.02(2)(c)
2. If visible emissions are observed from Boiler No. 4 records of the event shall be maintained and be readily available for inspection for a period of five (5) years. These records shall include date, time, the findings of the incident, and the corrective action taken.	ADEM Admin Code r. 335-3-14-.04
3. The notification requirements of §63.7545 shall be followed as applicable.	ADEM Admin Code r. 335-3-11-.06(107)
4. The reporting requirements in Table 9 of 40 CFR Part 63, Subpart DDDDD shall be followed, as applicable, as stated in §63.7550(a).	ADEM Admin Code r. 335-3-11-.06(107)
5. As indicated in §63.7550(b), for units subject only to the requirement to conduct a five (5) year tune-up, a compliance report as specified in §63.7550(c) shall be submitted every five (5) years.	ADEM Admin Code r. 335-3-11-.06(107)
6. The recordkeeping requirements of §63.7555 shall be followed, as applicable.	ADEM Admin Code r. 335-3-11-.06(107)

No. 6 Boiler Summary

Description: 132 MMBtu/Hr Natural Gas Boiler

Operating Schedule: 8760 hours/year.

This unit is subject to the following NSPSs, NESHAPs, or MACTs

40 CFR Part 63, Subpart DDDDD

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
No. 6 Boiler	132 MMBtu/hr Boiler	PM	4.29 lb/hr	335-3-14-.04
No. 6 Boiler	132 MMBtu/hr Boiler	SO ₂	11.75 lb/hr	335-3-14-.04
No. 6 Boiler	132 MMBtu/hr Boiler	NO _x	26.25 lb/hr	335-3-14-.04
No. 6 Boiler	132 MMBtu/hr Boiler	CO	10.15 lb/hr	335-3-14-.04
No. 6 Boiler	132 MMBtu/hr Boiler	PM	$E=3.109(H)^{-0.589}$	335-3-4-.03(2)
No. 6 Boiler	132 MMBtu/hr Boiler	Opacity	<20%	335-3-4-.01

No. 6 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin Code r. 335-3-16-.03
2. Boilers 5 and 8 are subject to 40 CFR Part 63, Subpart DDDDD – Emission Standards for Hazardous Air Pollutants for Major Sources: Commercial, Industrial, and Institutional Boilers and Process Heaters as a Gas 1 Boiler.	ADEM Admin Code r. 335-3-11-.06(107)
3. Boilers 5 and 8 are subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	ADEM Admin Code r. 335-3-11-.06(1)
<i>Emission Standards</i>	
1. The particulate matter emissions from Boiler 6 shall not be exceeded the maximum emission rate of 3.109(Heat Input in MMBTU/hr) ^{-0.589}	ADEM Admin Code r. 335-3-4-.03
2. Opacity shall not exceed twenty percent (20%) as determined by six-minute average. During one six-minute period in any sixty minute period, this unit may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%).	ADEM Admin Code r. 335-3-4-.01

No. 6 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards continued</i>	
<p>3. Such that the major modification threshold for the Prevention of Significant Deterioration (PSD) regulations shall not be exceeded, the following emission limits shall apply:</p> <ul style="list-style-type: none"> ▪ The Particulate Matter (PM) emission rate from Boiler 6 shall not exceed 4.29 lb/hr as measured in accordance with 40 CFR, Part 60, Appendix A, Method 5. ▪ The Sulfur Dioxide (SO₂) emission rate from Boiler 6 shall not exceed 11.75 lb/hr as measured in accordance with 40 CFR, Part 60, Appendix A, Method 6. ▪ The Nitrogen Oxide (NO_x) emission rate from Boiler 6 shall not exceed 26.25 lb/hr as measured in accordance with 40 CFR, Part 60, Appendix A, Method 7 or 7E. ▪ The Carbon Monoxide (CO) emission rate from Boiler 6 shall not exceed 10.15 lb/hr as measured in accordance with 40 CFR, Part 60, Appendix A, Method 10. 	ADEM Admin Code r. 335-3-14-.04
<p>4. This unit shall be equipped with low NO_x burners and staged combustion air, properly installed, maintained, and operated to minimize the formation and emission of nitrogen oxides (NO_x).</p>	ADEM Admin Code r. 335-3-14-.04
<p>5. This unit shall be classified as a Gas 1 Unit as defined in 40 CFR Part 63, Subpart DDDDD. In order to maintain this classification this unit is limited to firing natural gas only.</p>	ADEM Admin Code r. 335-3-11-.06(107)

No. 6 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the Particulate emission rates of these units shall be determined by EPA Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
2. Compliance with the sulfur dioxide emission rate for this unit shall be determined by EPA Reference Method 6 or 6C in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
3. Compliance with the NO _x standard for this unit shall be determined by Reference Method 7 or 7E in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
4. Compliance with the Opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
5. Compliance with the CO emission rate for this unit shall be determined by EPA Reference Method 10 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03

No. 6 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
1. Boiler 6 shall meet the energy assessment and tune-up requirements found in Table 3 of 40 CFR Part 63, Subpart DDDDD as referenced in 40 CFR 63.7540(a).	ADEM Admin Code r. 335-3-11-.06(107)
2. At any time, should visible emissions be observed from Boiler No. 6 by plant personnel or a representative of the Department, action to correct this problem should be initiated within 4 hours. Records of each occurrence of observed visible emissions shall be maintained in a logbook suitable for inspection by the Department and should include the findings of the incident and what action was taken to correct the problem.	ADEM Admin Code r. 335-3-16-.05(c)
<i>Recordkeeping and Reporting Requirements</i>	
1. The facility shall maintain the records required under 40 CFR 63.7555(a) concerning initial notifications.	ADEM Admin Code r. 335-3-11-.06(107)
2. An annual compliance report shall be submitted in accordance with the requirements found in 40 CFR 63.7550(b).	ADEM Admin Code r. 335-3-11-.06(107)
3. The presence of any visible emissions from Boiler No. 6 shall be recorded. The facility shall keep records of the corrective action taken in the event visible emissions are observed. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from any of these points shall be recorded and reported during the semi-annual report.	ADEM Admin Code r. 335-3-16-.05(c)

No. 7 Boiler Summary

Description: 143.7 MMBtu/Hr Hazardous Waste Boiler

Operating Schedule: 8592 hours/year.

This unit is subject to the following NSPSs, NESHAPs, or MACTs

40 CFR Part 63, Subpart EEE

40 CFR Part 60, Subpart Db

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler (firing only natural gas)	NO _x	0.2 lb/MMBtu (30 day rolling average)	335-3-10-.02 (2)(b)
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	NO _x	54 TPY (12 month rolling total)	335-3-14-.04
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	PM	E=1.38(H) ^{-0.44}	335-3-4-.03
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	SO ₂	1.8 lb/MMBtu	335-3-5-.01(1)(a)
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	Opacity	<20%	335-3-4-.01
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	Mercury	1.2X10 ⁻⁶ lbs/MMBtu	335-3-11-.06(56)
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	Cadmium + Lead (combined)	6.2X10 ⁻⁶ lbs/MMBtu	335-3-11-.06(56)
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	Chromium	1.4X10 ⁻⁵ lbs/MMBtu	335-3-11-.06(56)
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	CO	100 ppmv (hourly rolling average)	335-3-11-.06(56)
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	hydrocarbon	10 ppmv	335-3-11-.06(56)
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	HCl + Cl (combined)	5.1X10 ⁻² lbs/MMBtu	335-3-11-.06(56)
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	PM	20 mg/dscm	335-3-11-.06(56)
No. 7 Boiler	143.7 MMBTU/HR Hazardous Waste Boiler	Principal organic hazard constituent (POHC)	99.99% destruction removal efficiency	335-3-11-.06(56)

No. 7 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, “Major Source Operating Permits.”	ADEM Admin Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin Code r. 335-3-4-.01
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03, Control of Particulate Emissions – Fuel Burning Equipment	ADEM Admin Code r. 335-3-4-.03
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin Code r. 335-3-5-.01(1)(a)
5. Boiler 7 is subject to 40 CFR Part 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.	ADEM Admin Code r. 335-3-10-.02(2)(b)
6. Boiler 7 is subject to 40 CFR Part 63, Subpart EEE – National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors.	ADEM Admin Code r. 335-3-11-.06(56)
7. Boiler 7 is subject to the requirements of the General Provisions as indicated in 40 CFR Part 60, Subpart A, unless otherwise stated in 40 CFR Part 60, Subpart Db.	ADEM Admin Code r. 335-3-11-.06(1)
8. Boiler 7 is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart EEE.	ADEM Admin Code r. 335-3-11-.06(1)

No. 7 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards</i>	
1. The particulate matter emissions from Boiler 7 shall not exceed the maximum emission rate of $1.38(\text{Heat Input in MMBtu/hr})^{-0.44}$	ADEM Admin Code r. 335-3-4-.03
2. Opacity shall not exceed twenty percent (20%) as determined by six-minute average. During one six-minute period in any sixty minute period, this unit may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%).	ADEM Admin Code r. 335-3-4-.01
3. The sulfur dioxide (SO ₂) emission rate from this source shall not exceed 1.8 lb/MMBtu.	ADEM Admin Code r. 335-3-5-.01(1)(a)
4. To ensure that the major modification threshold for the Prevention of Significant Deterioration (PSD) regulations shall not be exceeded, the following limits shall apply:	ADEM Admin Code r. 335-3-14-.04
<ul style="list-style-type: none"> ▪ The operation of Boiler 7 shall be limited to no more than 8592 hours per year. ▪ When firing liquid hazardous waste in Boiler 7, no more than 83% of the heat input may be derived from liquid fuel. ▪ The total NO_x Emissions from Boiler No. 7 shall not exceed 54 tons per year based on a 12 month rolling total as measured by the NO_x CEMS. ▪ In order to offset NO_x emissions, BASF shall not operate at least one of the following Boilers during periods when the No. 7 Boiler is in operation: The No. 4, 6, 8, or Rental Boiler. 	

No. 7 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards continued</i>	
5. The facility shall limit the firing capacity for liquid hazardous waste to the maximum capacity achieved during the most recent compliance testing in which the facility demonstrated compliance.	ADEM Admin Code r. 335-3-16-.05
6. This unit shall be equipped with low NO _x burners and staged combustion air, properly installed, maintained, and operated to minimize the formation and emission of nitrogen oxides (NO _x).	ADEM Admin Code r. 335-3-14-.04
7. In order to comply with 40 CFR Part 60, Subpart Db, the NO _x emission rate from this unit must not exceed 0.2 lb/MMBtu, based on a 30 day rolling average while firing only natural gas.	ADEM Admin Code r. 335-3-10-.02(2)(b)
8. In order to comply with 40 CFR Part 63, Subpart EEE, this unit must comply with the following emission limits when hazardous waste is in the combustion chamber: <ul style="list-style-type: none"> • The Mercury emission rate from Boiler 7 shall not exceed 1.2X10⁻⁶ lbs/MMBtu • The combined Cadmium and Lead emission rate from Boiler 7 shall not exceed 6.2X10⁻⁶ lbs/MMBtu • The Chromium emission rate from Boiler 7 shall not exceed 1.4X10⁻⁵ lbs/MMBtu • Boiler 7 shall not exceed 100ppmv, based on an hourly rolling average • The hydrocarbon emission rate from Boiler 7 shall not exceed 10 ppmv • The combined Hydrogen Chloride and Chlorine emissions from Boiler 7 shall not exceed 5.1X10⁻² lbs/MMBtu • The Particulate Matter (PM) emission rate from Boiler 7 shall not exceed 20 mg/dscm • The unit shall achieve at least 99.99% destruction removal efficiency (DRE) for principal organic hazard constituent (POHC) emissions. 	ADEM Admin Code r. 335-3-11-.06(56)

No. 7 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures</i>	
<p>1. Compliance with the Particulate emission rates of these units shall be determined by EPA Reference Method 5 or 5I in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.</p>	ADEM Admin Code r. 335-3-10-.03
<p>2. Compliance with the sulfur dioxide emission rate for this unit shall be determined by EPA Reference Method 6 or 6C in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.</p>	ADEM Admin Code r. 335-3-10-.03
<p>3. A CO monitor shall be installed, calibrated, maintained, and continuously operated in compliance with the quality assurance procedures provided in the Appendix to Subpart EEE and Performance Specification 4B in Appendix B of 40 CFR Part 60. The CEMS shall be used to determine compliance. An alternative monitoring plan may be used provided prior approval by the Department is granted.</p>	ADEM Admin Code r. 335-3-10-.03
<p>4. A NOX monitor shall be installed, calibrated, maintained, and continuously operated in compliance with the Performance Specification of 40 CFR Part 75. The CEMS shall be used to determine compliance. An alternative monitoring plan may be used provided prior approval by the Department is granted.</p>	ADEM Admin Code r. 335-3-10-.03
<p>5. Compliance with the Opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.</p>	ADEM Admin Code r. 335-3-10-.03
<p>6. Compliance with the Mercury emission rate for this unit shall be determined by EPA Reference Method 29 in Appendix A of 40 CFR 60 or waste feedstream analysis in accordance with 40 CFR 63.1207(m)(2). Alternate test methods may be used provided prior approval by the Department is granted.</p>	ADEM Admin Code r. 335-3-10-.03

No. 7 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures continued</i>	
7. Compliance with the combined Cadmium and Lead emission rate for this unit shall be determined by EPA Reference Method 29 in Appendix A of 40 CFR 60 or waste feedstream analysis in accordance with 40 CFR 63.1207(m)(2). Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
8. Compliance with the Chromium emission rate for this unit shall be determined by EPA Reference Method 29 in Appendix A of 40 CFR 60 or waste feedstream analysis in accordance with 40 CFR 63.1207(m)(2). Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
9. Compliance with the Hydrocarbons emission rate for this unit shall be determined by EPA Reference Method 25 or 25A in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
10. Compliance with the combined hydrogen chloride and chlorine emission rate for this unit shall be determined by EPA Reference Method 26, 26A, 320 or 321 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
11. Initial comprehensive performance tests shall be conducted in accordance with 40 CFR Part 63.1207 within six months of startup of this unit for Combined Hydrogen Chloride and Chlorine, Particulate Matter, and Principal Organic Hazardous Constituents. Subsequent testing shall be performed no more than 61 months after the previous test. The Department must be notified in writing at least one year prior to each scheduled test date.	ADEM Admin Code r. 335-3-11-.06(56)

No. 7 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures continued</i>	
12. Initial performance testing shall be conducted in accordance with 40 CFR Part 63.1207 within 6 months of start-up of this unit for Hydrocarbons and Dioxin and Furan.	ADEM Admin Code r. 335-3-11-.06(56)
13. Feedstream analysis must be conducted for Mercury, Combined Cadmium and Lead, Chromium in accordance with 40 CFR 63.1207(m)(2) prior to feeding material to the unit.	ADEM Admin Code r. 335-3-11-.06(56)
<i>Emission Monitoring</i>	
1. In order to ensure that the facility does not exceed its CO limit, a carbon monoxide CEMS which meets the specification of 40 CFR Part 60 Appendix B will be installed and operated at a location approved by the director. The CEMS will be certified and maintained in accordance with 40 CFR Part 60 Appendix B.	ADEM Admin Code r. 335-3-11-.06(56)
2. In order to ensure that the facility does not exceed its NO _x limit, a nitrogen oxides CEMS which meets the specification of 40 CFR Part 75 will be installed and operated at a location approved by the director. The CEMS will be certified and maintained in accordance with 40 CFR Part 75.	ADEM Admin Code r. 335-3-16-.05
3. The facility will install, maintain, and calibrate a flow meter in accordance with 40 CFR Part 75, Appendices A, B, and C.	ADEM Admin Code r. 335-3-16-.05

No. 7 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring continued</i>	
4. This unit must set and maintain minimum combustion chamber temperature, maximum flue gas flow rate or production rate, and maximum hazardous waste in order to ensure compliance with the 99.99% destruction removal efficiency of POHC in accordance with 40 CFR Part 63.1209(j).	ADEM Admin Code r. 335-3-11-.06(56)
5. At any time, should visible emissions be observed from the No. 7 Boiler by plant personnel or a representative of the Department, action to correct this problem should be initiated within 4 hours. Records of each occurrence of observed visible emissions shall be maintained in a logbook suitable for inspection by the Department and should include the findings of the incident and what action was taken to correct the problem.	ADEM Admin Code r. 335-3-16-.05(c)
6. This unit would continuously monitor the flow rate of hazardous waste into Boiler 7 and shall not exceed the maximum flow rate set during the most recent compliance test	ADEM Admin Code r. 335-3-11-.06(56)
<i>Recordkeeping and Reporting Requirements</i>	
1. Records shall be maintained for the occurrence and duration of any startup, shutdown, or malfunction in the operation of the process equipment and any malfunction of the air pollution control equipment. These records shall be kept in a permanent form suitable for inspection and will be retained for at least five (5) years.	ADEM Admin Code r. 335-3-16-.05
2. The facility shall maintain records of the hours of operation for Boiler 7 for a 12-month rolling period. The records, which may be in the form of a log or a checklist, shall be kept in a form suitable for inspection for five (5) years.	ADEM Admin Code r. 335-3-16-.05

No. 7 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirements continued</i>	
<p>3. The presence of any visible emissions from Boiler No. 7 shall be recorded. The facility shall keep records of the corrective action taken in the event visible emissions are observed. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from any of these points shall be recorded and reported during the semi-annual report.</p>	ADEM Admin Code r. 335-3-16-.05(c)
<p>4. The facility shall maintain records of the amount of natural gas combusted in this unit during each day, and shall calculate an annual capacity factor at the end of each calendar month.</p>	ADEM Admin Code r. 335-3-10-.02(2)(b)
<p>5. The facility must submit a startup, shutdown, and malfunction (SSM) plan in accordance with 40 CFR Part 63.1206(c)(2)(ii)(B) that meets the requirements of 40 CFR Part 63.6(e)(3).</p>	ADEM Admin Code r. 335-3-11-.06(56)
<p>6. In the event of excessive exceedances, meaning 10 or more exceedances during any 60-day block, the facility must submit a report to the Department documenting the exceedances, the results of the required investigation, and corrective measures taken, within 5 calendar days of the 10th exceedance in accordance with 40 CFR Part 63.1206(c)(3)(vi).</p>	ADEM Admin Code r. 335-3-11-.06(56)
<p>7. The facility must maintain records of the following as required by 40 CFR Part 63.1211(b) :</p> <ul style="list-style-type: none"> • Calculation of hazardous waste residence time • Startup, shutdown, and malfunction plan • Documentation of investigation and evaluation of excessive exceedances during malfunctions • Corrective measures related to automatic waste feed cutoff that results in an exceedance • Weekly automatic waste feed cutoff testing • Emergency safety vent (ESV) operating plan 	ADEM Admin Code r. 335-3-11-.06(56)

No. 7 Boiler Provisos

Federally Enforceable Provisos

Regulations

Recordkeeping and Reporting Requirements continued

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| <ul style="list-style-type: none">• ESV opening events during hazardous waste combustion and a record of corrective measures taken• Operator training and certification program• Operation and maintenance plan• All other applicable records required by 63.1211(b) <p>8. The facility must submit a notification of compliance status within 90 days of the completion of initial performance testing as required under 40 CFR Part 63.1207(j).</p> <p>9. A semiannual report shall be submitted to the Director no more than 30 days from the end of each semiannual period. Each report shall include the following information:</p> <ul style="list-style-type: none">• The operating time of the unit in hours during the semiannual period (by month).• Each 12-month rolling total for NO_x emissions from the unit during the semiannual period.• The volume and heat value (in MMBtu) of hazardous waste material burned in the unit during the period.• The date, time, and duration of all startup, shutdown, and malfunction events.• A description of the cause and corrective action taken for all malfunctions.• The date, time, duration, cause, and corrective action taken for all instances of automatic waste feed cutoff.• All information required for excess emissions and continuous monitoring performance report and summary report as required under 40 CFR Part 63.10(e)(3) and 63.1211(a).• All information required for periodic startup, shutdown, and malfunction reports under 40 CFR Part 63.10(d)(5)(i) and 63.1211(a). | <p>ADEM Admin Code r. 335-3-11-.06(56)</p> <p>ADEM Admin Code r. 335-3-11-.06(56)</p> |
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No. 8 Boiler Summary

Description: 132 MMBTU/HR Boiler

Operating Schedule: 8760 hours/year.

This unit is subject to the following NSPSs, NESHAPs, or MACTs

40 CFR Part 63, Subpart DDDDD

Pollutants Emitted

Emission Point	Point Description	Pollutant	Emission Limit	Standard
No. 8 Boiler	132 MMBtu/hr Boiler	PM	0.175 lb/MMBTU	335-3-4-.03
No. 8 Boiler	132 MMBtu/hr Boiler	SO ₂	1.8 lb/MMBTU	335-3-5-.01
No. 8 Boiler	132 MMBtu/hr Boiler	PM	$E=1.38(H)^{-0.44}$	335-3-4-.03(2)
No. 8 Boiler	132 MMBtu/hr Boiler	Opacity	<20%	335-3-4-.01

No. 8 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, Major Source Operating Permits.	ADEM Admin Code r. 335-3-16-.03
2. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, Visible Emissions.	ADEM Admin Code r. 335-3-4-.01
3. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.03, Control of Particulate Emissions – Fuel Burning Equipment.	ADEM Admin Code r. 335-3-4-.03
4. This source is subject to the applicable requirements of ADEM Admin. Code r. 335-3-5-.01, Control of Sulfur Compound Emissions – Fuel Combustion.	ADEM Admin Code r. 335-3-5-.01(1)(b)
5. This source is subject to 40 CFR Part 63, Subpart DDDDD – Emission Standards for Hazardous Air Pollutants for Major Sources: Commercial, Industrial, and Institutional Boilers and Process Heaters as a Gas 1 Boiler.	ADEM Admin Code r. 335-3-11-.06(107)
6. This source is subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart DDDDD.	ADEM Admin Code r. 335-3-11-.06(1)

No. 8 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards</i>	
1. Opacity shall not exceed twenty percent (20%) as determined by six-minute average. During one six-minute period in any sixty minute period, this unit may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent (40%).	ADEM Admin Code r. 335-3-4-.01
2. The particulate matter (PM) emissions from this unit shall not exceed the maximum emission rate of 1.38(Heat Input in MMBTU/hr) ^{-0.44} .	ADEM Admin Code r. 335-3-4-.03
3. The sulfur dioxide (SO ₂) emission rate from this source shall not exceed 1.8 lb/MMBtu.	ADEM Admin Code r. 335-3-5-.01(1)(b)
4. This unit shall be classified at a Gas 1 Units as defined in 40 CFR Part 63, Subpart DDDDD. In order to maintain this classification these units are limited to firing natural gas only.	ADEM Admin Code r. 335-3-11-.06(107)
<i>Compliance and Performance Test Methods and Procedures</i>	
1. Compliance with the particulate emission rates of these units shall be determined by EPA Reference Method 5 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
2. Compliance with the sulfur dioxide emission rates of these units shall be determined by EPA Reference Method 6 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03
3. Compliance with the opacity standard for this unit shall be determined by Reference Method 9 in Appendix A of 40 CFR 60. Alternate test methods may be used provided prior approval by the Department is granted.	ADEM Admin Code r. 335-3-10-.03

No. 8 Boiler Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Monitoring</i>	
1. At any time, should visible emissions be observed from Boiler 8 by plant personnel or a representative of the Department, action to correct this problem should be initiated within 4 hours. Records of each occurrence of observed visible emissions shall be maintained in a logbook suitable for inspection by the Department and should include the findings of the incident and what action was taken to correct the problem.	ADEM Admin Code r. 335-3-16-.05(c)
2. Boiler 8 shall meet the energy assessment and tune-up requirements found in Table 3 of 40 CFR Part 63, Subpart DDDDD as referenced in 40 CFR 63.7540(a).	ADEM Admin Code r. 335-3-11-.06(107)
<i>Recordkeeping and Reporting Requirements</i>	
1. The presence of any visible emissions from Boiler 8 shall be recorded. The facility shall keep records of the corrective action taken in the event visible emissions are observed. The records, which may be in the form of a log or checklist, shall be kept in a form suitable for inspection for five years. The presence of any visible emissions from any of these points shall be recorded and reported during the semi-annual report.	ADEM Admin Code r. 335-3-16-.05(c)
2. The facility shall maintain the records required under 40 CFR 63.7555(a) concerning initial notifications.	ADEM Admin Code r. 335-3-11-.06(107)
3. An annual compliance report shall be submitted in accordance with the requirements found in 40 CFR 63.7550(b).	ADEM Admin Code r. 335-3-11-.06(107)

No. 7 Boiler Storage Tanks Summary

Description: Hazardous Waste Storage Tanks UT-V-813 and UT-V-814 vented to the No. 7

Operating Schedule: 8760 hours/year.

These units may be subject to the following NSPSs or MACTs:

40 CFR Part 60 Subpart Kb

Pollutants Emitted

Tank Number	Size of Tank (gallons)	Material in Tank	Maximum Vapor Pressure (psia)	Control Technique	Standard
UT-V-813	30,000	Volatile Organic Liquid		Vent to Boiler 7	40 CFR Part 60 Subpart Kb
UT-V-814	30,000	Volatile Organic Liquid		Vent to Boiler 7	40 CFR Part 60 Subpart Kb

No. 7 Boiler Storage Tanks Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R 335-3-16-.03, "Major Source Operating Permits".	ADEM Admin Code r. 335-3-16-.03
2. Tanks UT-V-813 and UT-V-814 are subject to ADEM Administrative Code R. 335-3-6-.03.	ADEM Admin Code r. 335-3-6-.03
3. Tanks UT-V-813 and UT-V-814, are subject to the Federal New Source Performance Standards as listed in 40 CFR, Part 60, Subpart Kb—Standards of Performance of Volatile Organic Liquid Storage Vessels.	ADEM Admin Code r. 335-3-10-.02 (9)(b)
<i>Emission Standards</i>	
1. Tanks UT-V-813 and UT-V-814 are subject to the regulations found in 40 CFR Part 60 Subpart Kb. (40 CFR 60.110b - 60.117b).	ADEM Admin Code r. 335-3-10-.02 (9)(b)
2. Tanks UT-V-813 and UT-V-814 shall be vented to Boiler No. 7	ADEM Admin Code r. 335-3-10-.02 (9)(b)
<i>Compliance and Performance Test Methods and Procedures</i>	
1. The vapor pressures of the materials stored in the vessels subject to 40 CFR Part 60, Subpart Kb shall be determined as specified in 60.111b.	ADEM Admin Code r. 335-3-10-.02 (9)(b)
<i>Emission Monitoring</i>	
1. The facility shall comply with the monitoring procedures for tanks subject the 40 CFR Part 60, Subpart Kb as listed in 60.116b.	ADEM Admin Code r. 335-3-10-.02 (9)(b)
<i>Recordkeeping and Reporting Requirements</i>	
2. Tanks UT-V-813 and UT-V-814 are subject to the recordkeeping and reporting requirements found in 40 CFR Part 60 Subpart Kb. (40 CFR 60.115b).	ADEM Admin Code r. 335-3-16-.05
3. Records shall be maintained for all periods of operation during which the Boiler No. 7 is not in operation for tanks UT-V-813 and UT-V-814. Reports of all periods recorded during which the boiler was down shall be submitted in the semi-annual report.	ADEM Admin Code r. 335-3-10-.02 (9)(b)

Generators & Firewater Pumps Summary

Description: Includes 15 Generators (15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340, and 15-G-341) and 8 Firewater Pumps (#1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP).

Emission Point #	Installation Date	Operating Capacity	Calendar Year Limit	Non-Emergency Use
15-M-33	1988	489 hp	100 hours/year	50 hours/year
CG-396	1999	23 hp	100 hours/year	50 hours/year
CG-343	1997	166 hp	100 hours/year	50 hours/year
439-011	1999	207 hp	100 hours/year	50 hours/year
CG-225	1995	166 hp	100 hours/year	50 hours/year
CG-362	2000	170 hp	100 hours/year	50 hours/year
439-003	1994	88 hp	100 hours/year	50 hours/year
CG-12	1990	141 hp	100 hours/year	50 hours/year
CG-224	1995	755 hp	100 hours/year	50 hours/year
CG-158	1994	277 hp	100 hours/year	50 hours/year
15-G-39	1992	980 hp	100 hours/year	50 hours/year
15-G-236	1978	671 hp	100 hours/year	50 hours/year
CG-393	2002	149 hp	100 hours/year	50 hours/year
15-G-340	1988	671 hp	100 hours/year	50 hours/year
15-G-341	2009	197 hp	100 hours/year	50 hours/year
#1 FP	1989	700 hp	100 hours/year	50 hours/year
#2 FP	1989	700 hp	100 hours/year	50 hours/year
#3 FP	1989	700 hp	100 hours/year	50 hours/year
#4 FP	1971	280 hp	100 hours/year	50 hours/year
#5 FP	1975	280 hp	100 hours/year	50 hours/year
#6 FP	1975	280 hp	100 hours/year	50 hours/year
#7 FP	1975	280 hp	100 hours/year	50 hours/year
#8 FP	1971	280 hp	100 hours/year	50 hours/year

These units contain equipment that is subject to the following NSPSs, NESHAPs, of MACTs:
40 CFR Part 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ

Pollutants Emitted

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340	Generators	Opacity	≤ 20% as determined by six-minute average, with one six-minute period up to 40% in any one hour period.	Rule 335-3-4-.01
CG-224, 15-G-39, 15-G-236, 15-G-340,	Generators	HAP	No Specific Requirements	
15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-158, CG-393,	Generators	HAP	a. Change oil and filter every 500 hours of operation or annually, whichever comes first. b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Rule 335-3-11-.06(103)
#1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, #8 FP	Fire Pumps	Opacity	≤ 20% as determined by six-minute average, with one six-minute period up to 40% in any one hour period.	Rule 335-3-4-.01
#1 FP, #2 FP, #3 FP	Fire Pumps	HAP	No Specific Requirements	
#4 FP, #5 FP, #6 FP, #7 FP, #8 FP	Fire Pumps	HAP	a. Change oil and filter every 500 hours of operation or annually, whichever comes first. b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Rule 335-3-11-.06(103)
15-G-341	Generator	Opacity	≤ 20% as determined by six-minute average, with one six-minute period up to 40% in any one hour period.	Rule 335-3-4-.01
15-G-341	Generator	NO _x +NMHC	Shall not exceed 4.0 g/kW-hr	Rule 335-3-10-.02 (87)
15-G-341	Generator	CO	Shall not exceed 3.5 g/kW-hr	Rule 335-3-10-.02 (87)
15-G-341	Generator	PM	Shall not exceed 0.20 g/kW-hr	Rule 335-3-10-.02 (87)
15-G-341	Generator	HAP	Shall purchase only diesel fuel that meets the per-gallon standards of 40 CFR §80.510(b)	Rule 335-3-10-.02 (87)

Generators & Firewater Pumps Provisos

Federally Enforceable Provisos	Regulations
<i>Applicability</i>	
1. These units are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16, “Major Source Operating Permits.”	ADEM Admin Code r. 335-3-16
2. These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-4-.01 for opacity.	ADEM Admin Code r. 335-3-4-.01
3. The following sources are subject to the requirements of the General Provisions as indicated in 40 CFR Part 63, Subpart A, unless otherwise stated in 40 CFR Part 63, Subpart ZZZZ. <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340, #1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	ADEM Admin Code r. 335-3-11-.06(1)
4. The following sources are subject to the requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in 40 CFR Part 63, Subpart ZZZZ as referenced in ADEM Admin. Code 335-3-11-.06 (103). <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340, #1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	ADEM Admin Code r. 335-3-11-.06(103)
5. The generator 15-G-341 is subject to the requirements of the Federal New Source Performance Standards as provided for in 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.	ADEM Admin Code r. 335-3-10-.02 (87)
6. The generator 15-G-341 is subject to the National Emission Standards for Hazardous Pollutants General Provisions as provided for in 40 CFR Part 63, Subpart ZZZZ. Compliance with 40 CFR Part 60 Subpart IIII shall constitute compliance with this requirement.	ADEM Admin Code r. 335-3-10-.02 (87)

Generators and Firewater Pumps Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards</i>	
<p>1. Any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%.</p>	ADEM Admin Code r. 335-3-4-.01 (1)
<p>2. The following units shall comply with the emission limitations in 40 CFR Part 63, Subpart ZZZZ Table 2c (1).</p> <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, CG-393, 15-G-340, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	ADEM Admin Code r. 335-3-11-.06(103)
<p>3. The following units shall be operated according to the requirements in 63.6640(f)(2)(i) through (iii).</p> <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340, #1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	ADEM Admin Code r. 335-3-11-.06(103)
<p>4. The following units must minimize engine time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.</p> <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340, #1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	ADEM Admin Code r. 335-3-11-.06(103)

Generators and Firewater Pumps Provisos

Federally Enforceable Provisos	Regulations
<i>Emission Standards Continued</i>	
<p>5. In accordance with 40 CFR §60.4205(c), the generator 15-G-341 must comply with the emission limitations in 40 CFR 60, Subpart III Table 4.</p> <ul style="list-style-type: none"> • The sum of the emissions of non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_x) shall not exceed 4.0 g/kW-hr • Carbon monoxide emissions shall not exceed 3.5 g/kW-hr • Particulate matter (PM) emissions shall not exceed 0.20 g/kW-hr 	ADEM Admin Code r. 335-3-10-.02 (87)
<p>6. In accordance with 40 CFR §60.4211(e), the generator 15-G-341 shall only operate as specified below:</p> <ul style="list-style-type: none"> • Emergency situations • Maintenance checks and readiness testing not to exceed 100 hours per year • Non-emergency situations, not to exceed 50 hours per year (these 50 hours count toward the 100 hours per year allowed for maintenance check and readiness testing). The 50 Hours per year for non-emergency situation cannot be used for peak shaving or to generate income for the facility to supply power to an electric grid or otherwise supply power to as part of a financial arrangement with another entity. 	ADEM Admin Code r. 335-3-10-.02 (87)
<p>7. In accordance with 40 CFR §60.4207, the facility shall not purchase any diesel fuel for combustion in 15-G-341 that does not meet the following per-gallon standards of 40 CFR §80.510(b):</p> <ul style="list-style-type: none"> • Sulfur content shall not exceed 15 parts per million (ppm) • Cetane index shall be a minimum of 40 <u>or</u> the aromatic content shall not exceed 35 volume percent 	ADEM Admin Code r. 335-3-10-.02 (87)

Generators and Firewater Pumps Provisos

Federally Enforceable Provisos	Regulations
<i>Compliance and Performance Test Methods and Procedures</i>	
<p>1. The following units must demonstrate continuous compliance with the operating limitations in Tables 2c according to the methods specified in Table 6 (9) to 40 CFR 63 Subpart ZZZZ for all units.</p> <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-158, CG-393, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	<p>ADEM Admin Code r. 335-3-11-.06(103)</p>
<p>2. The generator 15-G-341 shall be operated and maintained according to the manufacturer's written instructions in accordance with 40 CFR §60.4206 and §60.4211(a).</p>	<p>ADEM Admin Code r. 335-3-10-.02 (87)</p>
<i>Emission Monitoring</i>	
<p>1. The following units must install a non-resettable hour meter and monitor all units according to the requirements of §63.6625(f) and §63.6635.</p> <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340, #1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	<p>ADEM Admin Code r. 335-3-11-.06(103)</p>
<p>2. The following units shall monitor and record all periods of operation according to the requirements of §63.6635</p> <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340, #1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	<p>ADEM Admin Code r. 335-3-11-.06(103)</p>
<p>3. In accordance with 40 CFR §60.4209, the generator 15-G-341, must install a non-resettable hour meter.</p>	<p>ADEM Admin Code r. 335-3-10-.02 (87)</p>

Generators and Firewater Pumps Provisos

Federally Enforceable Provisos	Regulations
<i>Recordkeeping and Reporting Requirement</i>	
<p>1. The following units shall keep records of the operation of the engine in emergency and non-emergency service, which is recorded through the non-resettable hour meter. The owner shall record the time of operation of the engine and the reason the engine was in operation during that time. These records shall be retained onsite for inspection purposes for a period of at least five years.</p> <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-158, CG-393, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	ADEM Admin Code r. 335-3-11-.06(103)
<p>2. The following units shall keep records in accordance with §63.6655 for the all units.</p> <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340, #1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	ADEM Admin Code r. 335-3-11-.06(103)
<p>3. In accordance with 40 CFR §63.6640, the facility shall report, for the following units, each instance in which it did not meet each operating limitation in Table 2c. These instances are deviations from the operating limitation and they must be reported according to the requirements in 63.6650(d) and (f).</p> <ul style="list-style-type: none"> • 15-M-33, CG-396, CG-343, 439-011, CG-225, CG-362, 439-003, CG-12, CG-224, CG-158, 15-G-39, 15-G-236, CG-393, 15-G-340, #1 FP, #2 FP, #3 FP, #4 FP, #5 FP, #6 FP, #7 FP, and #8 FP 	ADEM Admin Code r. 335-3-11-.06(103)
<p>4. In accordance with 40 CFR § 60.4214, the facility must maintain records of the time and reason for operation of the generator 15-G-341 for all hours the unit is in operation.</p>	ADEM Admin Code r. 335-3-10-.02 (87)